Issue 52 • November 4th 1989 • 58p

MASSIVE 72 PAGES!

NEW COMPUTER EXPRESS

BRITAIN'S BIGGEST SELLING COMPUTER WEEKLY

PC
- Cheaper Laserjets
- Pascal compilers
- Help for disabled

AMIGA
- 50 best programs
- GFA upgrades
- Batman cheat

ST
- MS-DOS system
- New music programs
- Booting from B

C64
- New games helpline

CPC • BBC • PCW
MSX • QL
ATARI 8 BIT
SPECIALIST COLUMNS

WHAT'S WRONG WITH THE STE?

Atari's fury as ten top developers give their verdict

page 2

EXCESS!

Appalling first birthday self-indulgence inside

page 53

TAKE ART

Superb computer art is created on 8-bits

page 12

KONIX SHOCK

page 3

50 AMIGA ESSENTIALS

PLUS 32 PAGES PACKED WITH THE BEST COMPUTER BARGAINS

★ SHOPPING EXPRESS ★

CONTENTS

FEATURES

NEW COMPUTER EXCESS 53
Happy birthday to us! Four pages of attempted wit

ARTY TYPES 12
Amazing computer art produced by eight-bit micros

THAT'S THE WAY TO DO IT 16
How to produce your own mag – we show you how we do it

IMAGE BANKS 14
The low down on high end image processing

BIG DISPLAY 18
Massive monitors from Sony

REGULARS

BUYERS' GUIDE 23
The essential software for the Commodore Amiga

COMMENT 4

LETTERS 9

EXPRESS SALES 39
The best bargains in the Local Group

JOBS 47
Roll up, get your new job here

TECH TIPS 58

READERS' CLASSIFIED ADS 34

GAMEPLAY 60
This weeks hard-hitting report on the coming and goings in the games world – releases, reviews, ranting...

VOUCHERS 21
Save £10!

YOUR MACHINE

Amiga 64
ST 64
PC 63
CPC 65
Spectrum 65
Commodore 64 69
PCW 70
QL 69
BBC 69
MSX 69
Atari 8-bit 70

ATARI ANGER AS STE CRITICISMS MOUNT

"We're furious, and you can print that" – Atari

Top ST software developers have prompted the wrath of Atari by criticising the new STE as 'too little, too late'.

They say the company has failed to come up with a computer which can challenge the Amiga.

Atari is furious at the criticisms being levelled at its new upgrade. A handful of programmers received a machine and were obliged to sign a non-disclosure agreement prohibiting them talking to the press – Atari says it will be taking machines from those who have broken that agreement. "They can have opinions but they should keep them to themselves," offered a furious spokesman.

Express asked 10 leading software developers for their opinions on the improvements to the long awaited machine, specifically the much vaunted blitter, stereo sound and the hardware scrolling.

Details of the machine were first outlined in *Express* (issue 33) last June and it was first shown in Dusseldorf at the end of August. The machine was, however, absent from the PC Show in October. The firm says it will be available in this country around Christmas time.

The STE is a direct upgrade to the 1040 and will be sold for the same price (£499). It is thought that, in time, it will replace the £399 520ST.■

• STE: Anger over criticisms

Why Atari is furious

It is standard practice for companies to insist that other parties involved in projects sign non-disclosure agreements. This is supposed to prohibit them talking to competitors (or to the press) about new products.

Atari clearly feels cheated that some of its close allies in the software world have no qualms about making their opinions on the STE known.

The firm is taking an unprecedented hard line and recalling machines from programmers who have talked to the press.

Such is the level of secrecy within Atari that those programmers deemed to be favourable toward bitter rival Commodore were not given machines in the first place.■

The programmers' verdict

WAYNE SMITHSON (*Blood Money*):
"Atari have done too little too late. Having extra colours is a waste of time since you can still only get 16 on screen at once. No-one will notice. Having even 32 colours would have been nice.

"The blitter is pretty useless as well because there's no barrel shift of any kind. You still have to shift the graphics. And apart from the odd shoot-'em-up the hardware scrolling will hardly be used. As for the stereo sound, that's an absolute nonsense. I think most users will be pretty disappointed."

JEFF LAWSON (*Flair Paint*):
"It's a missed opportunity. I can see people using the extra colours just because they're there, but I can't see them bothering with the dedicated hardware such as the blitter and hardware scrolling. If they'd used the 68030 chip it could have beaten the Amiga. It doesn't come close. I won't be doing anything for it."

GLEN CORPES (*Populous*):
"I'm still finding my way around the machine but it looks good for serious programmers. However, as a new release it's not too exciting. Games will have better sound and the graphics will have more subtle shading. But 256 colours on screen would have been really nice. The blitter's not as good as it could be."

JEFF MINTER (*Trip-a-Tron*):
"A lot of people won't bother taking advantage of it which is a shame. But if I get one I'll try and get the best out of it. I wouldn't mind using the hardware scrolling just because it's there but that's not really commercially viable."

JEZ SAN (*Starglider*):
"The Amiga is still better than the ST but it's a step in the right direction. Still, at the same price as the 1040 you can't complain. The colour palette bits are in a strange order which makes it difficult to access different shades and, as I understand it, the blitter is virtually unusable. You can't use interrupts to create the illusion of extra colours on screen. Mind you, I am looking forward to the Atari TT."

LES PLAYER (Ex Atari now at GFA):
"Atari hyped it long before it arrived and that was always going to be a problem. Even insiders at Atari weren't sure what the machine would be like and people started to read between the lines. As a software developer now I can see Atari having real problems getting people to write for it. But, to be fair, it's not really Atari's fault. It's just a problem of evolution."

JOHN BRANDWOOD (various Ocean games):
"It's an improvement but it's a bit late in the day. This is what the machine should have been in the first place. I think the blitter and hardware scrolling are the best parts and the machine was desperate for those. The stereo sound is a waste of time. End users won't notice the difference, maybe the odd art package will be a bit better. I don't like to be negative but I fear it's still not as good as the Amiga."

IAN HETHERINGTON (Psygnosis joint boss):
"Atari has managed to fill the gap between the ST and the Amiga by no more then seven to ten per cent. I haven't seen one but I know what it's going to be capable of. This is what the ST should have been originally."

ANDY PENNELL (various HiSoft products):
"It really should have been a bigger step forward but at least it's a step. For serious programmers it's good because it's easier to expand the RAM. And the blitter is nice. But after four years you would have expected a bit more. I think they've concentrated on the TT which is a good machine and not so much on the STE. It doesn't have the advantages of the Amiga but so few programmers use those that it doesn't really matter anyway."

STEVE BAK (*Goldrunner*):
"The prospect of the STE doesn't excite me. I won't even look at the machine until Atari have sold several hundred thousand units."

• Atari's spokesman refused to be drawn on any of the criticisms saying they are "contrary to a legal agreement". "Atari are going to come down heavily on those programmers who have broken the agreement. We're furious. And you can print that."

In the past Atari has taken a poor view of criticism in the press and has often successfully acted upon that. Although criticisms have been publicly rejected in the past this is one of those rare occasions when the company is genuinely enraged.

It's show business

Montbuild has finally announced its plans for an autumn computer show to rival the troubled PC Show next year.

The firm which once helped organise the PC Show will be staging the first Business Computing Show at Earls Court from September 25th to 28th.

Show goers will now find that instead of the traditional PC Show which encompasses all aspects of home and business computing they have two show – Montbuild's business affair and EMAP's European Computer Entertainment Show (September 13th to 16th).

The future of the PC Show is is serious doubt. Patron VNU used to organise it in conjunction with Montbuild but that firm split last spring. VNU has slapped a £5 million lawsuit on its former partner but Montbuild says that will be fought off.

Montbuild is hoping to attract top end manufacturers to its new show such as IBM, Wang and DEC. But expect to see the likes of Amstrad, Commodore and Atari present as well.

Meanwhile Commodore has spilt with Database over the organisation of the forthcoming Commodore Christmas Show (November 17th to 19th).

In the past Database had completely organised the event. This year it was to simply take care of the peripheral details such as cleaners and security. However, differences of opinion and Database's commitment to the Computer Shopper Show have forced a split.

Commodore has managed to woo bug names to its show such as Ocean and Electronic Arts. The firm is known to have been tired of seeing "grey importers" and box shifters virtually dominating the last few shows.

KONIX CASH BOOST BUT CONSOLE LATE

The Konix Multisystem will not appear until after Christmas – but at least the machine's future has been secured following a substantial cash injection.

Konix was to launch the machine this week but various problems have meant a delay. The firm's management has been involved in lengthy discussions over the past few months in a bid to attract a buyer for a large share of the company.

Last week it emerged that a Southampton based hardware distributor called Addons had stepped in to buy a large share of the company from its boss and founder Wyn Holloway.

Holloway has been in negotiations with Addons since the PC Show when staff from the distributor were constantly present on the Konix stand. Despite the bad publicity about Konix's PC Show presence Addons appears to have been impressed by public interest in the console.

It is not yet known how much Addons will have paid for the shareholding or how much of the company it owns but it is understood that Holloway no longer has sole control of the firm.

He had hoped to push his creation through singlehandedly but failed to raise the money needed through traditional sources such as banks. As a result he had to turn to a buyer.

• Multisystem: Money in, but it's late

It is still hoped that the Multisystem will be launched before Christmas although that is highly unlikely. Konix has still not booked any ads for the machine.

Addons has risen to prominence in the trade over the past few years as a top shifter of Commodore's products to dealers. It has a close relationship with the hardware manufacturer and this year sold more than £20 million worth of computers.

The Konix machine will stay the same and will still be priced at £229. However, Holloway will no longer have complete control over the product and its peripherals.

Virus launched against NASA

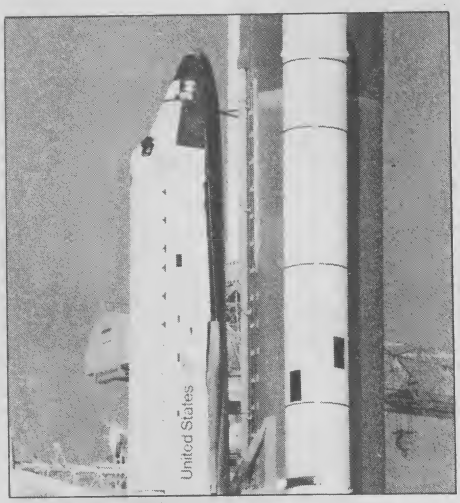
Anti-nuclear protesters have inserted a special virus into NASA's computer network opposing its work on the nuclear powered Space Shuttle.

The Fu Manchu virus failed to worm its way into the computers monitoring the Shuttle's launch late last month but did get through to the computers which will be used to carry data from the mission.

Computer operators at NASA found their DEC mainframe computer terminals infected with messages such as: "You talk of times of peace for all, and then prepare for war" appearing alongside others including "George Orwell was an optimist" and "WORMs against nuclear killers".

Some 6,000 computers are claimed to have been infected. NASA officials took the precaution of disconnecting especially sensitive computers from the network. Whilst NASA says no real damage has been done there are fears that the "garbage" data could be used by mistake. It is thought that the virus crept through a French network which is attached to NASA's computer system.

The launch of the Space Shuttle was surrounded in controversy because it uses nuclear fuels. Lift off was delayed for a few days while protestors tried to stop it through the law courts.



• Shuttle: Virus attack

Firebird faces the axe in MicroProse shake up

Games software house MicroProse is considering dropping the Firebird label which it bought from British Telecom only seven months ago (*Express* 23).

The firm is planning a major reshuffling of its labels at the end of the year with Firebird being closed down along with Microstyle which was launched only weeks before the Telecom deal.

At present MicroProse games come under five labels – MicroProse , Rainbird, Microstatus, Microstyle and Firebird. MicroProse feels this is all too confusing.

• Microstyle and Firebird games are all "lightweight" affairs with the emphasis on fun. However, Microprose dislikes the Firebird image and wants the games to be slightly more in depth and lasting. So Microstyle will stay whilst Firebird goes. Where to is not known.

• Rainbird has been a leading name in cerebral gaming for the past five years. Although Microstatus was launched with similar goals it can't hope to compete.

This will bring the MicroProse label down to three games with clear identities. MicroProse said it preferred not to comment on future plans.

Meantime, MicroProse is looking for top class programmers to join a new development team. Most MicroProse games are put together in the US but now the UK offshoot is looking to make an impact. "We've got most of the team together now but if someone can come and stun us then that would be great," offered a spokesman. MicroProse can be contacted on 0666 54326.

ALTERNATIVE MOUSE STYLE

A revolutionary new alternative to the mouse is being developed by a Dorking based company.

Culton Services has licensed a finger position sensor which could easily be designed into a computer's keyboard. The sensor works according to finger pressure and is claimed to be just as accurate as a mouse.

Manufacturers of portable computers have been stumped for an alternative with Apple and Atari having to plump for uncomfortable roller balls.

A special pad for desktop computers is also being developed by the firm. Culton is on 0306 885138.

COMMENT

SOME YOU WIN

There are two possible approaches to take over the Konix affair. One says what a shame it is that yet another British (i.e. not English but Welsh) entrepreneur has had their visionary scheme hindered by lack of money, how it could have provided hundreds of jobs and given the British computer industry a genuine lead over the Nintendos and NECs of this world, etc. etc.

The other is less generous. Konix – a hitherto obscure Welsh (i.e. not British or English) joystick manufacturer – never could take on the world, pundits said when the company announced its console. It simply can't compete against the big boys because it can't provide the sheer up-front cash and marketing muscle.

So far the console has survived on the oxygen of publicity only. At the recent PC Show punters were given the embarrassing sight of a stand with all the promo tapes and videos working but no console. The 'revolutionary' chair was just not working; a few copies of *Punch* and the place would have looked like a dentist's.

It is to be hoped that the console will come out, and will succeed. But the fact that it would do so only with a large injection of cash from the big boys outside to sustain it is a salutary lesson for the other little fish in the pond.

NOW WE ARE ONE

Express celebrates its first birthday round about now (this is issue 52, and the first issue, Issue 0, came out a year ago). Though most of you seem quite happy with the balance of the magazine, it's clear that news is what you're most interested in. Accordingly, Express will shortly be expanding its news section, making it an even better guide to what's happening in the world of home computers.

EDITOR • Rob Ainsley
FEATURES EDITOR • Andy Storer
ART EDITOR • Angela Neal
PRODUCTION EDITOR • Stuart Anderton
NEWS EDITOR • Colin Campbell
GAMES EDITOR • Maff Evans
ART ASSISTANT • Paula Mabe
ADVERTISEMENT MANAGER • Mark Salmon
DEPUTY AD MANAGER • Adrian Taylor
AD EXECUTIVES • Helen Kirkhope
Simon Moss
AD TYPESETTING • Terry Turner
PUBLISHER • Greg Ingham

© Future Publishing Ltd • 4 QUEEN ST, BATH, BA1 1EJ • TEL: 0225 446034 • FAX: 0225 446019
Subscriptions: The Old Barn, Somerton, Somerset (0458) 74011 • Printed by Redwood Web Offset, Trowbridge, Wilts • Distributed by Comag, West Drayton, Middx

SOFTWARE BUYING REVOLUTION LOOMS

A revolutionary new way of buying computer games is being tested by high street retailer WH Smiths.

The firm has installed a special computer in its Princes Street branch in Glasgow which will copy games while you wait. The experiment has been set up with software houses Code Masters and Elite as well as trade distributor TBD.

The trade feels that this is a good way of making the most of valuable shelf and stock space. Hundreds of computer games can be stored in the machine instead of on the shelves.

Buyers simply go in, buy a blank tape, and have the game of their choice copied. All Code Masters' and Elite's back catalogue of 8-bit budget games are being kept on the computer. In other circumstances WH Smiths would not bother to carry all these old games – only current big sellers. This gives games buyers more choice.

EXCLUSIVE

The computer being used is American in origin and is called the Avedas. TBD's Norman Smith told *Express*: "It looks just like a PC but can copy games over very quickly and without disturbing any of the normal copy protection. It's capable of copying games onto disk or tape "

"In the trade we have to be aware of the restricted space on shelves, this is a good way of offering people older games and saving space. We're able to give consumers access to three times as many titles as before.

The software houses say they are delighted to be able to get golden oldies into the shops instead of having them collect dust in the back of a warehouse. If the experiment is a success then Smiths plans to install more computers in branches throughout the country.

TBD and WH Smiths are even considering using the process to sell old audio tapes although that is at an early stage of development. TBD can be contacted on 0782 566566.

Earl quits CBM

Jeff Earl, Commodore's newly found public face, has left the company saying that he disagrees with the firm's "culture".

Earl was taken on as marketing manager only three months ago and in that time had established a good relationship with the press and much of the trade. However, he left the company abruptly two weeks ago.

Earl has quickly denied rumours that he was fired and says he left because he disagreed with the firm's management style.

He also denied that there had been a clash of personalities between himself and UK boss Steve Franklin. "I just realised that Commodore isn't the company that I thought it was. For all its years (it was set up in 1957) the British wing is very young. All the people there have been taken on since Steve became boss two years ago. But the parting was amicable." He said though that he disliked the firm's "culture" and its internal structure.

• *Earl: Out of Commodore*

Commodore is refusing to comment on the matter saying only that Earl left "to follow up opportunities elsewhere".

● SNIPPETS ●

IBM says damage incurred during the recent Californian earthquake will mean a delay on the launch of its major new disk drive due for launch early next year. Business software publisher Borland (based only miles from the earthquake's epicentre) has had to find temporary accommodation after its offices suffered major structural damage...

The Scottish are well known for their love of computing but enthusiasts often have to travel down into England for the shows. However, The Scottish Micro Show should be worth a look. It starts on November 18th at the Forum, Almondvale West, Livingston (off Junction 3 of the M8). Call 0422 330408 for details...

The religious group the Exclusive Brethren have been told that their children must learn computer skills at school. The group believes computers are "the devil's tool"' (Express 49). But Education Minister Angela Rumbold says no group of parents has the right to control lessons in schools...

Chinese fear computer crisis

Computer criminals in China are defrauding the country of hundreds of thousands of pounds as its technology fails to keep up with the skilled thieves.

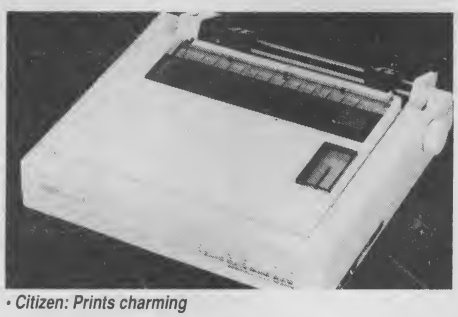
According to *The People's Daily*, dishonest computer literates are taking advantage of the country's poor computer security. It is estimated that there are some 50,000 computers in use in the country but most are basic and not built to withstand attacks from today's generation of high tech fraudster.

The first fraud was discovered in July 1986 at an office of the People's Bank of China in Shenzen. Since then 15 cases have been discovered the largest of which involved more than £150,000.

New model Citizens

Citizen has launched new printers into its "elite" range of Professional models – the ProDot 24, ProDot 9 and ProDot 9X printers.

The ProDot 24 offers 24 pin dot matrix printing at a speed of 240 cps in draft quality and 79 cps in letter quality and comes with a driver disk, which allows the printer to be driven by pull down menus. The cheaper ProDot 9 and 9X printers offers nine dot printing at 300 cps in draft quality and 60 cps in NLQ, with the 9X having a wide printer carriage.

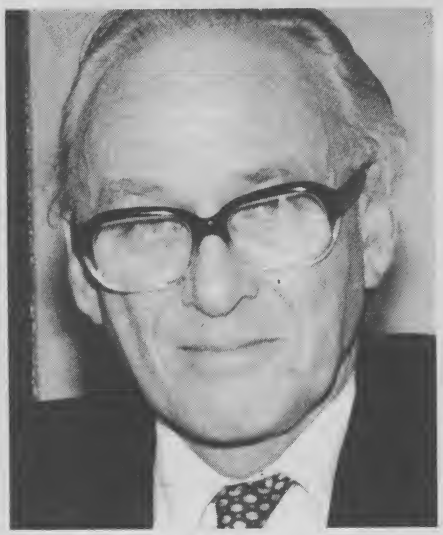


• *Citizen: Prints charming*

The ProDot 24 costs £599 whilst the ProDot 9 and 9X cost £439 and £559 respectively. As always, additional extras for the printers are available such as tractor feeders, sheet feeders and colour kits at various prices.

HACKING BILL FACES DELAY

One hundred leading industrialists and anti-hacking campaigners gathered at the House of Commons last week to demand early legislation which will outlaw hacking. They fear the forthcoming bill will be postponed in order to make way for other legislation.



• *Ridley: "Not computer literate"*

The companies descended on the Commons following the Law Commission's recent recommendations to make hacking illegal with a maximum five year prison sentence (*Express* 50).

They are particularly concerned that Nicholas Ridley, the Secretary of State for Trade and Industry, will give in to pressure from junior ministers who feel that other politically sensitive bills should be pushed through before the next election, leaving the hacking legislation aside. If so hacking would still be legal for at least two years.

Some have suggested that the Bill has already been dropped from the Government's 1990 programme although that has not been confirmed. The final decision will be revealed in the Queen's Speech at the official opening of Parliament next week.

The industrialists are asking three thousand firms to sign a petition urging Ridley to include the Bill. And John Banham, the boss of the Confederation of British Industries, has demanded a meeting with Ridley.

The CBI has long taken a tough line on hacking reflecting Britain's bosses fears about the menace. But reports have suggested that the bill will not be included in the Queen's Speech this month which will outline the Government's plans for the next twelve months.

Anti hacking MP Emma Nicholson commented: "He [Nicholas Ridley] is taking the issue far too calmly for my liking. But he's not computer literate so he can't be expected to understand."

Voice PC for handicapped

Zenith has come up with an extraordinary new PC which will help severely handicapped people get the most out of computing.

The voice controlled PC will come with specially configured software so that everything can be operated by the voice. The project has been undertaken in conjunction with PRAM Command.

Zenith says the PC's special circuit board will "train" the PC to understand commands regardless of slang, dialect or even speech impediments. An optional robotic arm which can retrieve documents from a printer is even in the offing.

"This system opens the world to the severely handicapped. They need no longer be cut off from the outside world or, indeed, even the working world," said Zenith's Clive Taylor. "These innovations will have repercussions, eventually, for everyone who uses a computer."

Not surprisingly the system is expensive. The basic kit costs more than $20,000.

• *Sooty: Computer literate*

Sooty sweeps into games

It seems that the strangest individuals are catching the computing bug. The latest convert is none other than Sooty.

In a recent episode (*The Good, the Bear and the Fluffy*) Sooty received a brand new computer and started playing games. However, his friend Matthew Corbett didn't approve of Sooty's new hobby especially as it began to look like an obsession.

Still, Sooty managed to persuade Matthew to start playing games and he had to admit that they really jolly good fun after all.

But there's no danger of Sooty becoming a computer addict. The two pals ended the episode by going outside to find other games to play.

Armed robbers turn to chips

Computer chips are emerging as California's newest attraction for armed robbers.

Gangs of thieves are reported to be raiding scores of warehouses and manufacturing plants in the technology intensive state. Such is the extent of the crime wave that the FBI and US Customs have begun investigations.

Many of the robberies are being undertaken by Vietnamese gangs who have switched their attention from gold to silicon. The gangs are called "gold people" because of their habit of storing personal wealth in portable gold. But now they're making a killing from chips.

One of America's largest computer manufacturers, Western Digital, says it has already lost £3.5 million worth of chips to thieves. And one recent raid on Express Manufacturing cost that firm £250,000 in chips.

The gangs are attracted to chips because they are not guarded as heavily as they might be and don't carry serial numbers. They are also extremely small and valuable. A fistful of chips can fetch thousands of pounds on the black market.

The gangs usually strike at night and are highly efficient. They are always armed and usually violent.

Chauk Chin, the owner of Express Manufacturing said he was attacked by two men who walked onto the factory floor and threatened him with handguns. They then tied up and gagged employees while they stuffed their bags with chips. Chin said the members of the gang operated with military precision.

Sergeant Peter Pearson of Santa Clara police said: "It's totally out of control. The Vietnamese gangs come in at four or five at a time and completely turn over a company."

Western Digital's vice president Robert Erickson commented: "There's not a company in this area that hasn't been hit."

Micro tips

Computer owners still unsure about the rudiments of their machines are being offered a free tips brochure by Price Waterhouse.

The guide outlines all the best housekeeping rules such as backing up disks, keeping food and drink away from the machine and keeping your computer cool. It also offers ten security tips which should keep your machine free from corrupted disks, viruses and unauthorised access.

"Many users are not carrying out basic procedures such as regular back up of vital data, and there is often little or no control over access to systems," explained Price Waterhouse's data security chief David Frost. The leaflet can be obtained by calling 01 378 7200.

We'll quit 16-bit says Psygnosis

Leading 16-bit software house Psygnosis is "seriously considering" dropping out of the ST and Amiga markets because of rampant piracy.

The firm says it is "sick and tired" of writing computer games just so they can be ripped off by parasitical crackers and pirates. Psygnosis says it will move into consoles, an area which the firm has been courting for some time.

"We released *Shadow of the Beast* on the Friday, it hit the shops on Saturday and I could buy a pirated version on Saturday night," said the firm's Ian Hetherington."We invest a lot of money, time and talent into these games. What's the point if we're not being rewarded? Anyone who says piracy is alright because the price of games is too high is talking rubbish."

Psygnosis has based its success over the past couple of years through graphically excellent games such as *Beast* and *Blood Money*.

Sex and CD

An Italian firm is planning to launch a CD-ROM set of disks containing explicit sex pictures.

The Unabashed History of Pornography is being sold by Milan based In-Cat systems. The five disk set contains 300 graphic images of sexual acts from a variety of historical periods. According to trade paper Datalink the static pictures are "of photographic quality" and are rated XXX.

It would appear that Italian regulations on such matters are not as strict as ours and In-Cat "is not aware" of differences in other countries.

HiSoft: not PD

This month's issue of *ST Format*, sister publication to *New computer Express*, contains an unfortunate error: HiSoft's MonST program is described as public domain. It is not.

All versions of MonST and the other programs that make up DevPac ST (versions 1 and 2) are the copyright of HiSoft and therefore should *not* be copied or otherwise treated as public domain.

DEEP THOUGHT THRASHED

Top chess computer can't beat human

Deep Thought, the world's most advanced chess playing computer, was last week beaten by world champion Gary Kasparov in 52 moves.

Typically, Kasparov used the victory as a vindication of human supremacy over any computer. "I had to challenge Deep Thought for this match to protect the human race," he told assembled chess fans and computer enthusiasts.

Deep Thought is a dedicated chess playing computer and can think through 720,000 possible moves every second.

However, in this match it was soon clear who was going to emerge victorious. The Grandmaster used a classic Sicilian Defence and then bewildered the machine by implementing a violent King's side attack cleverly disguising a sneaky passed pawn on the opposite wing.

The computer was still claiming to be level half way through the game when one piece down and under heavy attack.

Kasparov was jubilant after the exhibition at the New York Academy of Art. But he has a smarter rival waiting in the wings.

The development team behind Deep Thought are currently working on a machine which can think through a billion moves per second. That should be ready to take on the champion within two years.

He doesn't appear to be overly concerned. "I cannot visualise living with the knowledge that a computer is stronger than the human mind," he said. "Computers have their psychology too. If you know a computer well, you can anticipate its moves."

However, he gave Deep Thought some credit. "If a human player was beaten as decisively as I just beat Deep Thought he would be so intimidated he would be an easy target in the next game. But not a machine. It cannot be intimidated."

• Kasparov: Computer basher

SOFTWARE EXPRESS

For ATARI and AMIGA (021) 643 9100

ATARI

YOU KNOW...

that SOFTWARE EXPRESS publish the highly successful "DUNGEON MASTER EDITOR for the Atari ST and Amiga

YOU MAY NOT KNOW...

that we are also the LARGEST Atari and Amiga Specialist in the Midlands, and Southwest dealing in P.C.'s, Mega ST's, Amiga Desktop Publishing, Scanners, Lazer, Digitizers, Calamus, Epson Emulators, Databases, Word Processors and not forgetting Games.

Late Night Opening Thursday - 7pm

MIDLANDS
212-213 Broad Street,
BIRMINGHAM, B15 2JP
Tel: (021) 643 9100

For the best in Service and Support visit our Regional Branches

SOUTH
9 Exeter Street, (The Viaduct),
PLYMOUTH,
Devon, PL4 9AQ.
Tel: (0752) 265276

We Accept EXPRESS VOUCHERS

ATARI ST and AMIGA

Sixteen Bit Superdeals from the Sixteen Bit Specialists !

CUSTOMERS PLEASE NOTE! When comparing prices remember ours include fast delivery by courier.

NEW !!

520 STFM Power Pack
£359.00
Inc. VAT and Next Day Delivery

Now includes Hyperpack

Power Pack includes:
- ★ 520 STFM 512K Keyboard with Built-in 1 Megabyte disk drive and TV Modulator
- ★ Over £550 worth of games software, including OutRun, Gauntlet 2, R-Type, Space Harrier, Super HangOn and 16 more Top Games
- ★ Organiser Business Software including WORDPROCESSOR, SPREADSHEET and DATABASE.
- ★ First BASIC and First Music Utility Software
- ★ FREE JOYSTICK AND FREE MOUSE MAT WORTH £4.95
- ★ All leads, manuals PLUS MOUSE and free mains plug!

REMEMBER! Many ST's do not come with BASIC - ours come with ST BASIC REV D by Metacomco.

520STFM Explorer Pack
£279.00

- ★ Explorer Pack Includes 520STFM 512K Keyboard with built-in 1 Megabyte Disk Drive and TV Modulator
- ★ 1 FREE Game, ST Tutorial and METACOMCO Basic worth £25.00
- ★ All Leads, Manuals PLUS MOUSE and FREE Mains Plug! ★ Free mouse mat worth £4.95

1040STFM Super Pack
£439.00

★ Includes 1 megabyte keyboard PLUS £450 worth of software. Comprising 21 games and Organiser Business Software. Also includes Metacomco BASIC, Mouse Pad, all Leads, Manuals and Mouse.

1040STFM Business Pack
£439.00

Business Pack includes:
- ★ Atari 1040STFM Keyboard with 1 meg memory and 1 meg built- in disk drive plus TV modulator.
- ★ £385 worth of Business Software including MICROSOFT WRITE word processor (£150), SUPERBASE PERSONAL Database (£60) and VIP PROFESSIONAL Lotus 123 Spreadsheet clone (£150). Metacomco Basic (£25.00)
- ★ All leads, manuals and mouse.

MEGA 1 BUSINESS PACK
£529.00

Features:
- ★ Separate Keyboard and System Unit
- ★ All the Software included with 1040 STFM Business Pack.
- ★ Blitter chip installed for faster graphics

Inc SM124 Mono Monitor..... £628.00

Amiga A500 BAT Games Pack
£399.00
Inc VAT and Next Day Delivery

BAT Games Pack includes:
- ★ Amiga A500 512K Keyboard with Built-in 1 Megabyte disk drive.
- ★ Free TV modulator worth £24.99 allowing you to use the Amiga with a normal TV.
- ★ DELUXE PAINT II and PHOTON PAINT Graphic Packages WORTH over £100!
- ★ FREE, only-just-released BATMAN - THE MOVIE games software.
- ★ NEW ZEALAND STORY arcade games software.
- ★ F16 - INTERCEPTOR - amazing 3D flight simulator software.
- ★ A further £230 worth of Games Software, including BUGGY BOY, MERCENARY, BARBARIAN, WIZBALL & six more games.
- ★ FREE MOUSE MAT worth £4.95
- ★ Amiga BASIC, Amiga EXTRAS 1.3, Workbench 1.3 PLUS the Amiga Step by Step Tutorial.
- ★ All leads, manuals PLUS MOUSE and mains plug!

Amiga A500 Business & Games Pack
NEW !
£479.00

★ Includes Amiga A500 and TV modulator PLUS BATMAN: THE MOVIE, F18 INTERCEPTOR, NEW ZEALAND STORY and in addition a comprehensive suite of business programs including: KIND WORDS II, Word Processor (featuring Spellchecker and Thesaurus), HOME ACCOUNTS by Digita International and SUPERBASE PERSONAL database software.

AMIGA 1 MEG BAT GAME PACK
£529.00

1 Meg Bat Games Pack includes:
- ★ Fitted 1 Megabyte Memory Expansion + Real Time Clock Card
- ★ Everything listed for the A500 Bat Game Pack
- ★ DRAGON'S LAIR 1 MEG MEGAGAME!

ACCESSORIES

Quickshot II Turbo Joystick.....£9.95	Branded Memorex 3.5" DS DD Disks
Competition Pro 5000 Joystick £13.95	Box of 10.....£13.95
Competition Pro with Autofire £14.95	Memorex Disk Box
Konix Speedking Joystick £11.95	For 40 3.5" Disks £8.95
Red Mouse Mat with Amiga logo ...£5.95	Amiga 1/2 Meg Expansion £119.95
Plain blue Mouse Mat £4.95	Control Centre Atari or Amiga.....£39.95

Contriver Amiga and ST Mouse with FREE Holder and Mouse Pad £20.95

EXTERNAL DISK DRIVES

Atari SF314 1 Megabyte	£139.00
Amiga A1010 1 Megabyte	£109.00
Cumana 1 Megabyte Atari or Amiga	£99.95
NEC 1 Megabyte Atari or Amiga	£89.95
Atari Megafile 30 Hard Disk	£449.00
New! Commodore A590 20 meg hard disk	£369.00
A590 Hard Disk + Memory Upgrade installed	Phone

PRINTERS

Star LC24-10 24 pin incl. lead ST/Amiga	£259.00
Star LC10 including interface lead for ST/Amiga	£169.00
Star LC10 colour including interface lead for ST/Amiga	£219.00
Citizen 120D including interface lead for ST/Amiga	£159.00

SEIKOSHA 80 COLUMN PRINTERS - AMAZING PRICES

Seikosha 9 pin NLQ including interface lead for ST/Amiga	£139.00
Seikosha 24 pin LQ including interface lead for ST/Amiga	£239.00

MONITORS

Commodore Amiga A1084 Stereo colour Monitor inc lead	£249.00
Atari SC1224 Colour Monitor inc lead	£259.00
Atari SM124 Mono Monitor including lead	£104.00
Philips CM8833 stereo colour monitor inc. lead for ST or Amiga	£239.00

We Accept EXPRESS VOUCHERS

CREDIT CARD ORDERLINE ☎ 0908 378008 (Mon - Sat 9am - 6pm)

To order either call the orderline above with your Credit Card details OR make a cheque or P.O. payable to Digicom Computer Services and send it with your order to the address below. Callers are also most welcome at the address below

We Accept EXPRESS VOUCHERS

DIGICOM

Access

Unit 36, Wharfside, Fenny Stratford, MILTON KEYNES MK2 2AZ

All prices include VAT and delivery by courier

VISA

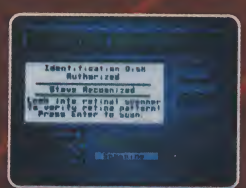
OMEGA™

MINDSCAPE INTERNATIONAL

Neural Cybertank Design and Simulation

Cybertank engineers control the destiny of the Organization for Strategic Intelligence. They're the heart of the **OMEGA** Project, a classified military contract that's shaping combat's future. Employing tomorrow's technology, OSI cybertank engineers design the chassis and artificial intelligence (AI) for the next generation of neural armored warriors — and they gauge their success on a simulated field of battle. Join these elite ranks, and pit your designs against the world's best.

IBM/COMPATIBLE VERSION



IBM/COMPATIBLE VERSION

APPLE VERSION

ORIGIN™
We create worlds.™

Available for: IBM/Tandy/compatibles, Commodore C-64/128, Apple II series, Atari ST and Amiga. Coming soon for Macintosh and Apple IIgs.

MINDSCAPE

For further information on Mindscape products and your local Dealer, contact:
Mindscape International Limited, PO Box 1019, Lewes, East Sussex BN8 4DW. Tel. (044 486) 545/547.

EXPRESS MAIL

Dear Reader

Another collection of comment, controversy, compliments... and Rob Ainsley's replies. Have you got something to say? Make your voice heard in computing's liveliest letters page! Send your contributions to: Express Mail, 4 Queen Street, Bath, Avon BA1 1EJ

PS. Sorry, but we just don't have the time to give personal replies, whether you include an sae or not. We're too busy putting Express together!

MORE NEWS IS GOOD NEWS

When people write in and say your magazine is wonderful, they don't tell you what it is they like. What I like best is the news. That's what I buy *Express* for.

Monthly magazines aren't good enough for news and most of them are dedicated to one type of computer so you won't get news about other computers and their related items. If it is possible, make it bigger!

Son Truong, Mansfield, Notts

• In a couple of weeks that's exactly what we're doing – expanding the news section to give you a better and more in-depth picture of what's happening.

COMMS TO A HEAD

Why did you use the most expensive examples when demonstrating the uses of a Modem in 'Beginners Comms' in *Express* 50?

You say 'it might take you two minutes to download a genuinely useful piece of software from a bulletin board - total cost 20p or so.'

20p for a couple of minutes? I can only think that the *Express* staff must have been using a long distance call to Telecom Gold during peak times! Even Micronet only costs about 2p a minute during off-peak times, and that's quite expensive!

Myself, I use the City (021-353-5486) regularly, which is a quite good local BB. There are no connection costs (though even connection costs are rarely more than 2p a minute), and an hour on the City will cost me around 50p in phone bills! There is a small difference between 50p and 'a quid or two'! So comm to your senses and try and give the novices a bit of encouragement!

Robin Morris, Sutton Coldfield, West Midlands

• Maybe the costings were a bit pessimistic, but you can't always guarantee that a local BBS will be available. However, we're happy to pass on your figures.

SAM HOPE

After waiting with eager anticipation for the long awaited unveiling of the SAM Coupé the day did finally dawn. No wonder it's taken three years to develop. They have made it invisible. It's now three weeks since I wrote to MGT for more information on the machine but alas not a word from them.

Is this how they hope to compete with the 16 bit machines? Or could it be by the time they get their act together it will be cheaper to buy a 16 bit machine anyway...

Vic Jordan, Burnley, Lancs

• Some SAMs are being shipped out at the moment. Latest position from MGT on 0792 791100.

WRONG PROTOCOL

I came across the article about the new Protocol portable computer from API Electronics in *Express*. Could you send me further details about their new model?

Vincent Page, Blata L-Bajda, Malta

• API was beaten to the contract for the amazing A4 PC portable by another firm, M3IPC, who will sell the machine as the Lapro for £899 (£200 more than API planned to sell it for). M3IPC is contactable on 0800 272515.

SLUG IT OUT

The recent letters in your magazine concerning dubious "Make Money from your Micro" mail-order schemes reminded me of a tale someone told me a while ago. He'd been having a bit of trouble with snails in his garden and so was particularly pleased to spot an advert in the local newspaper: "Totally infallible method of killing slugs, snails and other garden pests. Quick, easy and reliable, and works over and over again! Only £10. Send cheques/postal orders to...." etc.

He sent a cheque off and a few days later, he was received a small parcel through the post. Inside the package were two stones, labelled A and B, and a scrap of paper which read "1. Place snail/slug etc. on stone A. 2. Hit it very hard with stone B...."

Joel Grounds, Gwynedd, North Wales

• Ah! So now we know how these 'Make Money from your Micro' schemes work. Place the slug on the top of the monitor, then hit very hard with the keyboard...(That's enough gastropods – Ed.)

ARC LIGHTS

Your "Shopping Express" section doesn't seem too well up on all things Archimedes lately. So here are a few of the things you missed out of recent issues: Art packages - Besides *Atelier* and *Pro-Artisan*, there are also *Pax*, from Z&Z Software, £15.95, *Art Nouveau*, from Computer Assisted Learning Ltd.,£42.50, *Leonardo 256*, from Beard Technology, £17.50, *Render Bender*, from Clares, £79.95, and *Artisan 2*, from Clares, £59.95.

Scanners – you didn't mention any Archimedes scanners, while in fact there are: *Archie Hand Scanner*, from Watford Electronics, £149, a 100-400 dpi handheld scanner with multitasking RISCOS utility software; *Scan-Light*, from Computer Concepts, £450, a full width A4 scanner; *Scan-Light Junior*, also from Computer Concepts, £190, a half-width scanner with 100-400dpi resolution and software in ROM.

Sound Samplers – you only mentioned EMR's offering. There are in fact quite a few more: *Armadillo Sound Sampler*, from Armadillo, available in three configurations – mono, £130, stereo, £166, and stereo with MIDI, £186; *Armadeus*, from Clares, £150 for sampler and £80 extra for software.

Please try to do a bit more research in Shopping Express.

Iseset, Llandudno, North Wales

• Shopping Express is not a comprehensive guide to all packages available – there isn't enough room for that. Software just for the Archie would fill the magazine, never mind the dozen other machines we cover, so we just give you the best ones for each.

And us not supporting the Archie? Tosh! We had a whole page last week detailing the software available.

BIT O' CRACK

One thing that has intrigued me is the cracking of games. I, and many others probably, would love to be able to crack our favourite but difficult games, to see the rest of the game on screen.

So come on, could you give all us dumb critters who don't have an ounce of programming knowledge between us the secret formula to how it is done. I would be much obliged if you did so.

John Riddell, Keith, Banffshire

• And tell everyone how to beat copy protection systems? If we did that we'd get sued by every software house in the land, FAST, the Inland Revenue, the FBI, the MCC, the ANC... I'm afraid you'll have to make do with the comprehensive cheats and pokes we publish. But if you must have a hint, have a look in this month's issue of ST Format...

MAIL SUPREMACY

I have come across a first class mail order company. As far as I am concerned 10 out of 10 to Memory Expansion Systems for patience, first class service and fair prices. I would recommend them to anyone who requires extra memory, and is dubious about mail order companies.

Norman Stone, Chelmsford, Essex

• Well done MES. New Computer Express pencils are on their way.

SCAN KNOWLEDGE

In response to Ian Parker's letter concerning the price of *Daatascan* (*Express* 50) and your reply. The price of £150 quoted in Shopping Express was an error. *Daatascan* used to be £275 but has recently come down to £229 which includes the new software (which can be bought separately as an upgrade by users with earlier versions of the package.)

Colin Harvey, Norwich, Norfolk

• Sorry about that – we'll put it right in the next Shopping Express Scanners guide.

PIRATE SPEAKS

After buying my second hand Amiga I bought some pirated software. What attracts a lot of people is that it is so➤

BULLISH LETTERS

Amiga Emulators for the Atari ST (*Express* 50)? A load of bull. The Commodore Amiga features several dedicated custom chips, which provide it with its extra features and facilities. For instance, the Amiga has four-voice stereo sound, but the ST has only three-channel mono sound. The Amiga also has many extra features plus 512K operating system.

I'm not trying to slag off the ST, but it is an indisputable fact that the Amiga has a better technical specification.

I should think there are probably many Amiga owners who are hopping mad at Colin Westwood's suggestion that the Atari ST can emulate their beloved machine, which is an impossible task for even a Mega ST.

Joel Grounds, Gwynedd, North Wales

I am writing in support of Colin Westwood (Amiga Emulators, Express 50). *AMY68* does exist - I have a version of it (1.40+). This version runs on my Mega ST with 2Mb of RAM. Version 1.40+ includes an addition, Graphic-X, which is the 'Amiga graphics co-processor emulator.'

My manual (release 2A) describes, in detail, how *AMY68* works. Basically, it cross compiles code from the Amiga to the ST using a special 68000 cross compiler/ assembler. The author says that he is currently working on sound emulation.

I have run Amiga versions of *Della WP, Crazze Stop, Chuckie Egg, Ferrari Formula One, Interceptor, Jet, International Soccer, Captain Blood, B.A.T., Afterburner* and *Streetfighter*.

I have been able to run all my Amiga friends' BASIC programs (I bet you thought ST and Amiga owners couldn't be friends) with no problems. The whole system is beautifully documented and is extremely easy to use. *AMY68* comes on three disks, and the last disk contains a weird copy of AmigaDOS - version 1.3A.

It doesn't feel quite like the original in use and so if you have access to an original copy of AmigaDOS v1.3 you would be well advised to use that instead for best results.

I got my copy of AMY68 version 1.40+ from American shareware organisation DatLogik for $79.95 + VAT.

S.C.Hampson, Banstead, Surrey

• Well, there you have it. If you can get me a copy, then I'll be prepared to eat my words – I hope Joel Grounds will be, too! (And the words are: Madras, prawn, curry, rice, two, pints, lager).

cheap for what you get. But what they don't realise is that it's very cheap because there isn't a lot of it. In my experience of pirate software all you get for your money is a disk and that's it. This means that, without any instructions, 100% of serious software is useless and probably around 95% of games.
A.H. Foster, Bassett, Southampton

• Surely the more uncomfortable question is, what percentage of serious software and games is totally useless even with the instructions...

CLUB ST

In reply to a letter printed by Paul Bocij, I wrote to him about setting up a club for low income ST users. In reply, he sent me a long list of dos and don'ts. I need a lot of publicity to get the ball rolling. So could you please print my address in your letters page.
Marcus Mansukhani, 9 Days Green, Capel St. Mary, Ipswich IP9 2HZ

• Print your name and address? Good heavens no. Whatever next?

IRONIC ORIC COLUMN

A fascinating discovery! Noah used a computer to predict the flood, and I have found the keyboard in my loft. It's a 48K Oric-1 (some say it's almost as outdated as my Plus 3 Speccy). Can you give me any info please?
Bill Andrews, Bristol

• Certainly. God told Noah to build a massive Ark, specifying the exact number of cubits, and told him to put two of each animal onto it. Noah and the animals sailed round the world after it rained for forty days and forty nights and creationists say the Flood explains geology and why you find fossilised fish 25,000 feet up in the Himalayas.

Oh, sorry, you mean the Oric... No, we can't, but try Robert Cook, 10 Thompson Ave, King}s Norton, Birmingham, B38 8YD, who produces the Oric User Monthly; or Allan Whitaker HGC, 8 Staley Rd, Stalybridge, Cheshire SK7 3DT, 061 303 7369, who runs a mail order service.

AND THE WORD WAS... AARDVARK

I would like to correct you on your statement in *Express* 47 about the Bible being riddled with inconsistencies and mistranslations.

Any apparent disagreement in the Bible can be resolved by looking at the context of the scripture in question and also by comparing other parts of the Bible. The Bible was written by around 40 people over a period of 1,600 years. The fact that the writers agree at all is in itself a miracle and proof that, as the Bible says, it is inspired by God (see Timothy 3:16).
D. Allanson, Malton, N. Yorks

• We don't wish to offend any readers of Express – at least, not unintentionally – but I still stand by what I said.

EASY FOR YOU TO SAY

Your magazine gives over a lot of column space offering moral judgement to readers who write advocating software piracy. I imagine that it's easy when working for a magazine industry to imagine that all computer users have "legal" access to as vast a range of software as you do.

This is plainly untrue. For new users the sense of alienation at the lack of software, and frustration at its price, can be overwhelming. Most users are offered copies very early on as they almost always know somebody else with the same machine. It would be foolish and naive to brand these people "thieves."

The industry need to take a far more realistic and less moralistic viewpoint. Ask yourself this - how much so you think the average user spends on software? I know some users who spend a colossal amount, many hundreds of pounds a year. Some schoolchildren spend almost all of their money on software.

The truth is this, something that FAST have totally failed to realise; if copying was impossible, these people would not spend a single penny more on software. They simply would not buy the machine in the first place. For all except the very rich and highly enthusiastic it would simply not be worth it.

The "legal" user – which, I assure you, is extremely rare outside the world of free review copies and gifts to the press; would have access to a miniscule proportion of the vast range of software available to their machine. Even then this would involve a massive outlay. FAST's figures of x-billion-pounds-lost-each-year are quite frankly laughable if they're working on the assumption that every program shared between private users would normally have been bought by each one!

The piracy of business and education software is bad news. These are institutions who can afford to pay and on the whole get good value. Also organized piracy "bootlegging" outfits are hardly more acceptable. But private copies of games between friends is hardly more an act of theft than reading someone else's paperback.
Jim Blackler, Lancaster

• Whatever the circumstances, it's still illegal, and any sort of attempt to justify it, and therefore legitimise and glamorise theft is, I'm afraid, quite reprehensible. Your views are:
• Inconsistent (why is piracy of games good but business and education software bad? Because you want to play games)
• Hackneyed (the same arguments have been made before many times) and
• Plain wrong (FAST don't base their figures on the lines you suggest, and the comparison with reading the paperback is pointless. This is like letting someone else play your legitimate copy of the game, which is quite fair enough. Giving them a pirate copy of it is like photocopying the paperback, which is illegal).

HACK ATTACK

I feel that much of the authorities' (ie the state and its allies in business) paranoia about hacking is in fact a smokescreen: the "evil hacker" is put forward, with the connivance of much of the media, as a bogeyman so that more important issues of how computers can affect our lives (viz. the number of powerful bodies who have 'legitimate' access to mounds of personal information about us) can be conveniently forgotten – compare and contrast the draconian nature of the anti-hacking proposals to the loophole-ridden Data Protection Act and see what I mean.

In fact, the proposed new laws to imprison hackers have one particularly frightening implication from this point of view. Consider the following scenario: a hacker, caught by the authorities after the passing of the new law, is given the following choice; " Either we prosecute and nail you right up to the wall, or... you do some little jobs for us."

Hackers end up being forced by those in power to assist them in their information gathering – M15 could have the files of CND and other anti-government organisations hacked, the Inland Revenue and Poll Tax authorities could hack every little bit of information about your financial affairs... The result would be far worse than any of the horror stories seen in the media about hacking.

I wonder if this is not in fact the whole idea – I understand that hackers tend to be very individualistic and anti-authoritarian, and would not under normal circumstances sell their services to those in authority. This may seem like a paranoid conspiracy theory, but are you really so naive as to believe that the power-elite always act in the best interests of those they profess to serve?
Neil Page,Chesterfield, Derbyshire

• New Scotland Yard which is a centre for the power-elite and their lackeys who want to control your lives and who force innocent hackers to find out everything about you the naive innocent public and (cont'd p327)

• I don't know where you get this idea that we're pro the power elite.

The danger of hackers being used by the police is, I suppose, there, though if the genuinely innocent hacker is clumsy enough to get caught 'just looking' they wouldn't be much use to the police. The Inland Revenue have sweeping powers to examine your financial affairs as it is, as any comedian or jockey could tell you, and the disparity between the Data Protection Act and the proposed anti-hacking legislation has been pointed out before by us.

All in all yes, you have a point, but I don't think we need bring in Amnesty International just yet.

ON THE CHEAP

I'm tremendously impressed by the chart in *Express* 50 which appears to show that the latest generation of CD-ROMs cost only one and a half pence. I've had difficulty tracking down even the expensive removable hard disks which by the same chart cost £9.50. I hope you'll be publishing supplier's addresses soon.
David Langford, Reading, Berks.

• The graph was actually meant to show price per megabyte for the various systems, but our art supremo decided that it looked prettier without the legend on the bottom.

SNIPPETS

What is "Euro-pop" music? This is often mentioned in your games reviews, but I'm not sure exactly what it is. Is it good or bad?
Joel Grounds, North Wales (again)

• Europop is a sort of disco musical Big Mac, designed to be inoffensive to all nationalities, and hence utterly bland and characterless. It is a Bad Thing.

Don't you think it's disgraceful that the price of a first class stamp has now gone up to 20p? This means that to write to *Express* it now costs one third of the price of the magazine! Still, it's worth it.
Joel Grounds, North Wales

• Yes, it's appalling that stamps now cost 20p for first class, only 80% arriving the next day (which the ultimate responsibility of the government). But it hasn't stopped you writing twice this week!

If it is any comfort to the Plymouth Brethren sect that sees computers as the handtool of the Devil (*Express* 49), EMP (electromagnetic pulses) could destroy all computers made with integrated circuits, and only valve or mechanical computers would survive. If this did happen would they attribute it to an Act of God?
J. Treeby, Plymouth

• The major cause of EMP would be a large scale nuclear conflict. This would not only wipe out the world's computers, but also the world's inhabitants. If that happens I hope God has taken a backup.

PILOT LIGHTS

I appreciate Dave Marshall of Digital Integration taking the trouble to reply to my letter in *Express* 48 concerning copy protection and narrow US style screens in his game *F16 Combat Pilot*. I'm not a programmer so I can't comment on his statement that a PAL (UK) version would run more slowly than its NTSC (US) equivalent, but I accept his arguments for copy protection.

However, he states that it would not make economic sense to produce separate UK and US versions of his software. It seems to make economic sense to Commodore themselves who produce UK configured Amigas, PAL Workbenches and PAL monitors.

Finally, my remark about "disregard for UK users" referred solely to the lack of a PAL version of his game and not to his customer service, which I don't doubt is first rate.
Stephen Mercer, Shaftesbury, Dorset

In reply to Dave Marshall, there exists a place where you can get hold of games which are written for the Amiga only, where the whole screen (256 lines PAL) is used, and where there does not exist any copy protection. (In fact, you are encouraged to spread the programs.) The place is called the public domain.

The public domain library for the Amiga consists of more than 400 disks, where many of them are filled with games. If anyone wants quality games, written for the Amiga by Amigos, I would highly recommend the PD libraries.
Anders Bjerin, Richmond, Surrey

• And there you have it.

AT MICRONET WE'RE REALLY TALKING!

FREE MODEM
with annual subscription

With Micronet you can turn your computer into a communications terminal that will download free software, access up-to-the minute computing information, play exciting multi-user games, talk to other people (and computers) and a lot more.

And if you pay for a year's subscription in advance we'll even give you a modem free when you join.

FREE SOFTWARE

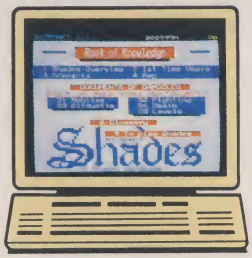
On Micronet you can browse through an extensive software library of free programs, select one and then download it.

We now have software for all popular machines, from the Spectrum to PC compatibles, including the Atari ST and the Amiga.

INFORMATION

Micronet is also a computer magazine. Our computer news area is updated every day, so there's no better way to stay up-to-date, and our software reviews and features for all popular micros mean Micronet members are always better informed.

Add to this Prestel's massive database and you'll have all the facts at your fingertips.



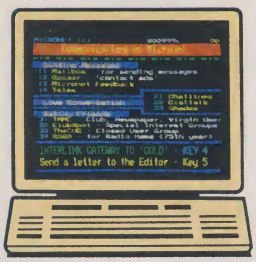
ENTERTAINMENT

But Micronet is not just informative, it's also a lot of fun! As a member you'll have access to a range of games, including the UK's most popular multi-user game, Shades, where the action is live and so are your opponents!

FREE DEMONSTRATION

If you have access to a modem (1200/75 baud) and viewdata communications software you can see a free demonstration of Micronet. Just Dial 0272 250000 and use the ID 4444444444 and password 4444.

You can look up a local telephone number once on-line.



COMMUNICATIONS

And with Micronet you can use your computer to communicate with thousands of other users. From electronic mail, telex and fax to chatlines and teleconferencing, Micronet lets you do the talking.

LOW COST

A Micronet subscription, which includes Prestel, costs just £23 a quarter, and using Micronet starts at only 55p an hour including telephone charges! Wherever you are, Micronet is just a local phone call away.

Just phone our Sales Desk free on 0800 200 700 or clip the coupon today for a free brochure and details of how you can get a free modem.

Join Micronet, and get talking!

Return to: Micronet, Units 8/10,
Oxgate Centre, Oxgate Lane, London NW2 7JA

Name: _____

Address: _____

_____ Age: ____

Tel. No.: _____

Machine Type: _____

NCE 13

MICRONET

Free modem offer available in the UK only to new members while stocks last. Minimum subscription period 1 year.

• An illustration by Danny Jenkins.

ART FOR A

Computer art has progressed beyond simple cartoons and heavy metal imagery, as Angela Neale discovers at an exhibition in the West Country

• "The Big Spiral" by Isaac Victor Kerlow

Is it really art? The question long ago asked when photography first emerged is now reverberating around the galleries at the Arnolfini, Bristol's contemporary art centre, but for a new reason - electronic art. At one time it was enough to wow everyone with gadgetry, but now artists are using the medium to produce technological 'art' – for art's sake.

The exhibition of electronic print was part of the Bristol Print festival and included the work of over 30 international artists. All of the pictures were produced using computer technology and brought together various fields of electronic printmaking.

The exhibition was exciting not only for the work on display, but also for the attitudes and foresight of the exhibiting artists. It was refreshing to see computer art hanging on the walls of a major gallery and treated with as much respect as art of a more traditional kind.

The many unexplored areas in electronic art and design give an impetus to the artists to continually look to the next stage as both the technology and the artists themselves develop. The overriding feeling from the show was that the work on display was transient, ready to be updated and replaced by the next advance.

Computer art is challenging traditional painters by looking at art from a new viewpoint - anyone with a modicum of artistic skill can use their imagination to produce something for themselves. Most of the artists began working on fairly cheap home computers, though many of them have progressed towards more complex set ups, but the dominating idea is that the snobbery surrounding art can be broken down by anyone with a computer and the inclination to use it.●

IN THE ART OF THE CITY

Mike King and Richard Wright are both computer artists and lecture at City Poly in London. They run courses for professional designers and artists who wish to learn programming and use paintboxes to further their creative work .

Richard Wright was training as a painter and became interested in alternative ways of making pictures. He explored mathematical and geometric ideas, first designing on paper and then realising that what he was trying to produce could be executed more efficiently on a computer. He started with a Commodore 64 in 1980 and did his own programming from day one, as this gave him space to produce rather less rational art than a package could allow. As he progressed the need to improve print out quality became apparent, so Richard moved over to an IBM PC at the IBM scientific centre in Winchester.

Mike King first used computers in his art quite by coincidence after watching a Horizon TV programme. He saw similarities between the chaotic stage his work was going through and the things the computers were being shown to do. He set out with a BBC micro and programmed his own software.

Mike and Richard have a vision of a generation that is growing up computer literate with a common language, and can enter the art world through a computer connection. They believe that this will help to break down the barriers thaT make art inaccessable to young people.

• Work by Richard Wright

• Dr Mike King and some of his work at Arnolfini

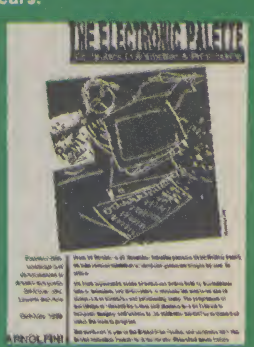
COURSES AVAILABLE AT CITY POLY

The only qualification for entry to these courses is a strong art and design background. Most people use them as a postgraduate course or as a supplement while working, but that doesn't mean they're closed to anyone who has the right credentials. The courses have been running for between two and five years.

● **Two year diploma course**
Two days a week in computer graphics and programming. This course is Government funded and costs £120 per year

● **Short courses**
10 weeks for two evenings a week.
Introductory paint systems £190
Advanced paint systems £260
3D Graphics £170
Design and layout for DTP (Taught on *PageMaker* but based less around the package than the importance of typography and good design) Fee to be confirmed

The fees quoted are approximate For more details call City Poly on 01-283 1030 and ask for the arts faculty.



ALL

• "Finale 2" by John Pearson.

• "Hand Memory" by Barbara Messim.

MARK WILSON

Mark Wilson trained as an abstract painter at Yale and initially became attracted to computers for slightly off beat reasons - the beauty and intricacy of circuit boards rather than what they could do.

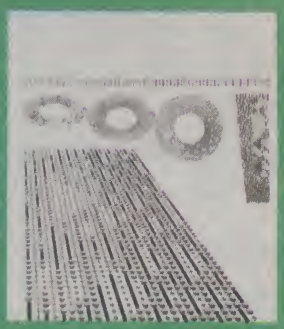
After realising the powerful opportunities that machines could offer and with home computers becoming affordable he bought a Texas TI/994 A and began to construct a program for himself. It took several years of frustration and tinkering before a generally unsophisticated piece of software evolved.

Later he moved on to an IBM PS/2 and a colour plotter. Mark stressed that writing his own program gives him greater flexibility and fewer restrictions than a package could ever provide. He says a lot of his work comes from experimentation with this basic piece of software and often gives totally unexpected results. He finds computers "all consuming" and now uses no other media.

"Many powerful artists are among the leaders in exploiting machines but have to become aware of the limitations of computers as well as the advantages."

• NAC L4 (Left)

• Mark Wilson and his exhibits (Below)



• CHRF 30 Vector plot

FAB 4 STUDIOS

Jeremy Norton and Danny Jenkins are both postgraduate students at Bristol Polytechnic and work primarily with computers. Unusually, they specialise in illustration and their work appears regularly in the pages of *Express* and other magazines brochures and advertising literature.

They were both attracted to computer painting systems out of curiosity and novelty and, having college equipment close to hand, quickly became involved in the medium.

"I found there was none of the restrictions that conventional media had imposed on me and ideas could be developed further and faster on a computer," said Jeremy. He uses a Pluto eight-bit paintbox and RGB "Pandora" 24-bit paintbox both running on Tandon PCs and also *Freehand* on a Mac 2. "I like the ability to output to hardcopy or paste directly in to DTP software. The disadvantages are expensive software and square eyes!"

Danny uses other media and has done video work with Yazz, TV work and customisation of cars with spray cans but also uses the paintbox systems at the poly. "Most computer art I've seen I thought was fairly horrible - technically clever but lacking noticeably on the creative side. Computer art made to look like oil paintings. I find the great thing about using computers is the speed at which drawings can be developed. You can take a drawing in any direction and take any risks you want, completely mutilate and experiment the work to death without the worry of losing it forever by just saving the crucial stages."

Little illustration work is done on computers, probably because access to hardware is difficult and the fact that computers are expensive, but Danny and Jeremy have a vision of young artists taking out bank loans, getting a computer and making extremely large amounts of cash! "Still, we'll see!" said Danny.

They both feel strongly that computer art should be practiced by creative people rather than programmers, then perhaps it could really have the presence to capture people's imagination.

• Danny Jenkins and Jeremy Norton with some of their work

ALTERED IMAGES

Mark Bennet explored the very expensive world of image processing at a recent London show

The Wembley Exhibition Centre was host last week to Image Processing '89, Europe's first major exhibition in the rapidly expanding field of image processing (IP). The show's 90 exhibitors covered a broad range technology from flatbed scanners for use in digital archiving to complex colour medical 3D imaging systems, and were all keen to get their share of a market estimated to be worth $468,000,000 by 1992.

While we lowly home micro users may have felt lost at the show it was good place to see what image processing was all about. Defined simply, it's the appropriation and manipulation of images, whether they be taken from satellites, a video or a video camera placed in a high powered microscope.

Go digital

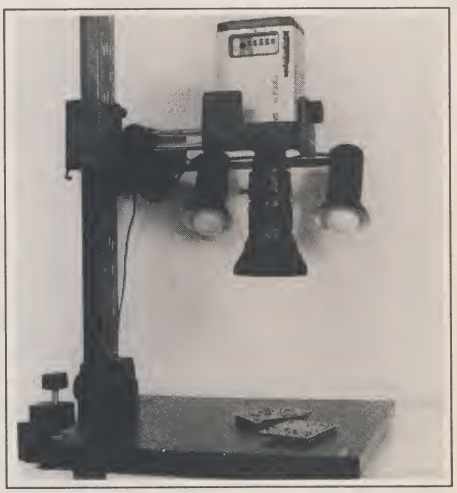
Once you decided what you want to digitise and get into the computer, you have to figure out which way to do it.

Traditional flat bed scanners were at the show being used for OCR (optical character recognition) for text recognition, but they were eclipsed in number and variety by CCD cameras (charge couple device - the chip used in most hand held video cameras) that featured high resolutions, high shutter speeds and the ability to handle depth.

Having decided on which camera or scanner you're going to use, you need to find a digitising board that will convert the analogue signal into something the computer can use. A wide variety were on show, for various computers ranging from the Archimedes to Sun workstations. Most however were prohibitively expensive, if state of the art in terms of processing power.

For the most part, image processing remains in the hands of the very rich and bureaucrats. The latter are speeding up and replacing the traditional filing systems with products like Callhaven's *MD Mars*. This is a system for archiving and retrieving of documents which runs on a Mac II. The system, costing thousands of pounds, is designed to archive any type of electronic or hardcopy documents on high capacity optical disks. It can store an entire filing cabinet's worth of information and retrieve it in a few seconds. It can, for example find any word on any page of text in a 1,000 volume set of 500 page books in less than five seconds. Storage is in a 'jukebox' WORM optical disk – an autochanging drive holding several disks.The drive stores 160 gigabytes, equivalent to 2,000 80Mb hard drives. If your filing cabinet is bulging call Callhaven on 01-549 5612●

• MD Mars can store gigabytes of text or graphics for instant retreval on a Macintosh

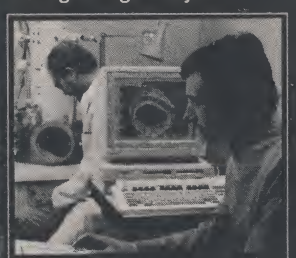


• Digitising images is most commonly done with a video camera incorporating a CCD. This one is from JVC

ON THE ARC

Acorn made a big showing with their Archimedes, the top level machines – the 400 series– being ideal for image processing work.

One exhibitor was demonstrating using an Arc to help patients with retinal problems. The *Digit* image analysis



• Doctors atLondon University use the Arc for eye research

software is currently being used in one hospital to measure visual pigments. The computer generates 3D stereo images of the optic nerve. Also at the show were:

• Timestep Weather Systems, suppliers to MOD and the US Air Force, now offers a range of low cost remote image processing systems based on the Archimedes which makes use of the Landsat satellite, sending pictures to the computer owner for under £600.

• Cambridge based company GEMS was showing the latest version of *Gemsoft36* - the portable UNIX based image processing package written in C.

• Watford Electronic was displaying its video digitiser which can manipulate images in various ways; squashing, rotation, stretching as well as straight input for desk top publishing, graphics, animation, image analysis and recognition. The company also showed the Arc hand scanner and graphic tablet.

• Wild Vision demonstrated hardware expansion cards which included genlocks, digitisers and frame stores.

• Foster Finlay showed three icon driven packages written in C for image processing, image analysis and image libraries.

• Plenty of interest in the Archimedes at Image Processing '89

IN THE MOVIES

Lundy UK were showing the *Pixar II* system, which it distributes in the UK. The high end image processing system was originally developed at the computer division of Lucasfilm Ltd in 1979 to help create computer graphics for use in the Star Wars series of movies. Films which use of the *Pixar* include Star Trek II: The Wrath of Khan, The Return of the Jedi and Young Sherlock Homes. The computer division spun off from Lucasfilm in 1986 and was bought by Steve Jobs, co-founder of Apple and owner of NeXT. The system is now being used for satellite image analysis, non-destructive testing, and high quality animations which have won an Oscar. You may have seen animations created on *Pixar* systems on Channel 4 last week.

The same firm produces the Render Accelerator an add in board for PCs. The board gives 286 and 386 PCs the power of five 25Mhz 386 computers, allowing the creation of photo realistic images on the desktop.

• Spot the difference: the Pixar system removed the knife from the top picture as if it had never been there

Dowling COMPUTERS

HEAD OFFICE:
Unit 48
Tyne Road
Sandy, Beds, SG19 1RB
Tel: 0767 81750/60
Fax: 0767 81730

VISA

We Accept EXPRESS VOUCHERS

If you're serious about Computing, FORGET the rest - TRUST the BEST!

BEDFORDSHIRE	CAMBRIDGESHIRE	HERTFORDSHIRE
3 Harpur Centre	Cromwell Mews	49 Railway Street
Lower Floor	5 Station Road	Warren Place
Harpur Street	St. Ives	Hertford
Bedford	Cambs	Herts
Tel: 0234 273090	Tel: 0480 300800	Tel: 0992 554469

ALL PRICES INCLUDE VAT, DELIVERY AND A FULL 1 YEAR GUARANTEE!

THE NEW Dowling MEGA PACK

Atari 520STFM Computer featuring:

- 1 Meg Drive
- Quality Mouse Controller
- Quality Mouse Mat
- Organiser Business Software
- Hyper-Paint
- Hyper-Draw
- Borodino (war strategy game)
- £50 discount voucher
- 10 x 3 1/2" DS/DD disks

Plus £450 Super Software Pack Comprising of the following:

Arkanoid	Buggy Boy	Ikari Warriors	Return to Genesis
Beyond the Ice Palace	Chopper X	Marble Madness	Road Wars
Black Lamp	Eddie Edwards	Super Ski	Quadralien
Seconds Out	StarQuake	Thrust	Xenon
Ranarama	Summer Olympiad	Thundercats	Zynaps
Test Drive	Wizball		

ONLY £349.95

THE NEW INCREDIBLE AMIGA A500 BATMAN PACK ONLY £399.99

And for a limited period only DOWLING are giving away the 10 Star Games Pack Comprising:

Amegas	£14.95
Insanity Fight	£24.95
Art of Chess	£24.95
Mercenary Comp	£19.95
Buggy Boy	£24.95
Terrorpods	£24.95
Thundercats	£24.95
Ikari Warriors	£24.95
Wizball	£24.95
Barbarian Ultimate Warrior	£19.95

ABSOLUTELY FREE....Value £229.50

AMIGA 1/2 MEG UPGRADE

£74.95

Offer valid until 14.11.89 with this voucher only and on a one voucher per person basis

100 x 3 1/2 SONY DS/DD DISKS

£59.95

+ High Quality 100 Capacity Lockable Disk Box
The above disks are 100% certified error free GENUINE SONY disks which is why Dowling give them a lifetime guarantee

Offer valid until 14.11.89 with this voucher only and on a one voucher per person basis.

ZIP-STICK SUPER-PRO JOYSTICK

- Single Shot
- Rapid Burst
- Megablast - continuous fire
- Fully micro-switched

RRP £16.95

£9.95

Offer valid until 14.11.89 with this voucher only and on a one voucher per person basis.

Why Dowling Computers?

Here are just a few reasons why customers prefer us:

★ First and Foremost, we really CARE about our customers' needs
★ ALL OUR STAFF are trained to give a friendly personal service.
★ EMPLOYING ENGINEERS ourselves, we won't send repairs away for weeks on end!
★ That's why we at Dowling say "FORGET THE REST - TRUST THE BEST"

ORDERING MADE EASY

Try to call in to one of our shops for the best possible service and advice

Order by phone by calling our Head Office quoting your Access/Visa Number

Order by Post - make Cheques, Building Society Drafts or Postal Orders payable to Dowling Computers

N.B. Please add £6 for Courier Delivery

STAR LC10 COLOUR PRINTER ONLY

£199.95

INC VAT & DELIVERY

REMEMBER - FORGET THE REST, TRUST THE BEST

Offer valid till 14/11/89 with this voucher only and on a one voucher per person basis

The publishing process. Above from left to right:

• Planning: The articles for the next issue are discussed. Already the editor has a pretty good idea of what the finished article will look like, in terms of text content and illustrations. A rough is sketched out showing the writer and artist what is required in terms of content, number of words, type of illustration etc.

• Illustrations: The photographs and illustrations are taken. In desktop publishing, the slowest part is the taking and developing of photographs, so this has to be done first.

• Writing: The article is written directly onto disk (or typed up onto disk if it's a freelance contribution from outside). The editor may, if the article looks as though it's heading in the wrong direction, get the writer to rejig the article. In theory, once it's typed onto disk, only typing errors and spelling mistakes can be corrected. In practice major re-writes are often done. (Continued opposite)

• Final proofing: The corrections to the first proof made, a second proof is printed out. (Because the whole page is stored on disk, these corrections can take just a few seconds.) In theory there should be nothing to change at all, but in practice...

• Phototypesetter: The high-definition version of the now perfect page is printed out. The machine uses a photographic technique to print on light-sensitive paper.

• Artwork: Any artwork – probably just the odd processed photo – is literally cut to size and pasted onto the page. Space is left for colour pictures which must be processed by a specialist firm. If there are any serious typing errors spotted now, a 'patch' – a bit of paper with the correct spelling – is pasted over the offending part . (Continued opposite)

THE DESKTOP EXPLOSION

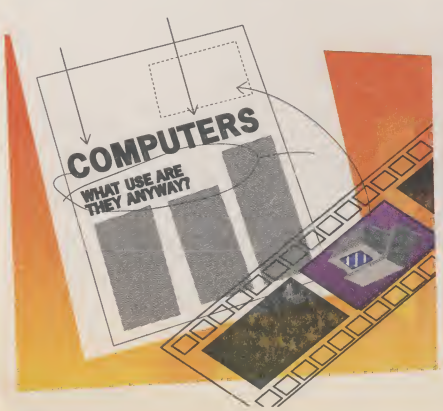
Desktop publishing technology is revolutionising the magazine world – and now you can get in on the act. The New Computer Express team explains how...

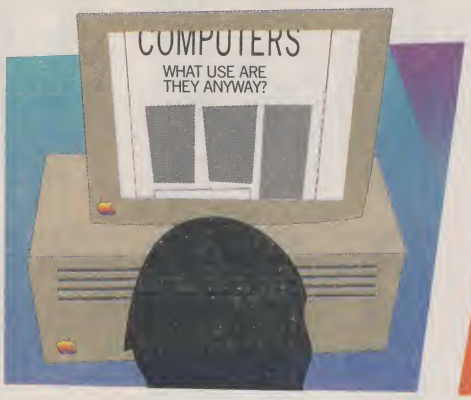
DTP has utterly changed the way magazines are put together. Computers can handle all the text, hold all the pictures, check the spelling, lay the pages out, and do colour separations. It means magazines can be produced far faster, cheaper and more easily than with traditional methods. Most importantly, it means anyone with a micro, software and printer can produce their own publications – company or club newsletters, parish magazines, even booklets – by themselves. All you supply is the time and the talent.

Professional setups – like that used to put *New Computer Express* together – can cost vast amounts of money: half-a-dozen Apple Macintoshes at three grand each, a laser printer for two grand, a phototypesetter for ten grand, software on top of that.... But you don't need to spend a fortune. You can produce desktop publications on a Spectrum or an Archimedes. All you need is a printer, some software and plenty of patience – the steps involved in producing a publication are the same whatever you're making.

What you need to produce is separate pages that will look just as you want the printed result to look. This is called 'camera ready artwork'. Printers – such as your high street Kall-Kwiks and Prontaprints – have special cameras that take pictures of the artwork and then print it by a process called offset lithography.

Traditional magazine production goes something like this. The journalist writes the copy on a typewriter. This gets passed to the sub who makes corrections with a pen on the manuscript. The new text is keyed into a typesetting machine which produces a long column of text. This is passed to the artists who literally cut the text into little chunks and fit it around the various artwork and pictures, which are also stuck on in the right place. The result is a page of 'camera ready' artwork, looking just as the final page will look, with lots of different bits of paper stuck on. The headlines, for example, are printed out separately to the main text as they're in a different size, and will be stuck on as a separate bit of paper in the right position on the page. (The joins don't show on the printed result). This goes to the printers who take high-definition picture of each page, print, collate and bind them. The distributors then take the magazines to the shops.





But as for new technology... well, the printing and distribution steps are pretty much the same, but the process of actually producing the camera ready artwork is rather different. The whole page – headlines, line drawings, columns, centred text, even some illustrations – is prepared on a computer screen. The journalist's original copy is used all the way, taken straight off disk, meaning no re-keying. Fiddly little changes can be made right up until the last minute, making it easier to get the content and the look of the article just right. Perhaps most important for the home user, you can put a page together without paste up and artwork skills (though professional magazines still use trained artists).

Professional setups use laser printers to produce proofs of pages. These only give definition of about 300 dots per inch, which is not quite smooth enough for a national magazine, so a phototypesetter is used to output the artwork for use by the printers. This gives much better definition.

You can do the lot on your own printer, of course. The steps outlined on these pages are still valid for a parish magazine, say, but your own dot matrix printer will produce the proofs and final version.

Picture this

There are two ways of putting pictures into the appropriately sized gap you've left on a page. The first is the more traditional way. You start with a normal black and white print and have it rephotographed through a dotted sheet of plastic. This turns it into a pattern of black dots, like on a newspaper photo. (Colour photos and transparencies can be scanned with a special machine to produce either black and white or colour results). The processed photo is then pasted into the correct place on the camera-ready page. Printing shops will process photos for you for about £5 .

The other way is to incorporate the processed version of the picture on the computer, storing the graphics file on disc as a part of the page. The photo then appears when the phototypesetter prints out the page, instead of having to be added by hand afterwards.

You can buy hand scanners that will capture a photo on disc for you for about £120 upwards.●

• Styling: The subs put the headings, body text etc. into the correct sizes and styles, and puts in the necessary bold and italic styles. They check the text fits in with the style of the magazine, .is legal, and any facts are correct. The subs will also write the headlines and introductions for the text, and will go back to the author to get them to write to the exact length required. At this stage spelling and grammatical errors are corrected.

• Layout: The artist now takes over and puts the correctly sized and styled text onto a pre-designed 'grid'. The text goes into columns and spaces are made for where the pictures will eventually go.

• Proofing: The sub looks at a laser-printed version of the page. They look for any spelling mistakes, typing errors and so on which have eluded the system, and perhaps cut or add a little text or move a picture to make things sit on the page better. Though in theory that is all, in practice the writer will make stylistic changes and even rewrite passages make the article that little bit better, to the annoyance of everyone else!
(Continued below left)

• Separation: Any colour pages are separated out into four versions, one each to hold cyan, magenta, yellow and black. These four elements combine on top of each other when printed to give the final, full colour, page. This can be done directly from the phototypesetter for simple pages, but articles with many colour pictures must be done by a specialist.

• Printing: The page goes off with all the others in the magazine to the printers, where it is printed, collated, stapled, trimmed and put in huge piles on pallets

• At last: The magazine hits the streets – and only now do you notice that typing mistake in the article you wrote!

YOU AT HOME CAN JOIN IN

The essentials for a desktop publication are a micro, some software and a printer. If you want to do things semi-professionally, you'll go for an Apple Macintosh Plus with hard disk – about £1500 – and page makeup software such as Aldus *PageMaker* or Quark *XPress* (another £800 or so). You'd then get your made-up pages printed out by a specialist bureau for you on their phototypesetter.

More realistically, you can set yourself up with a DTP system for under £100 by buying the right software...

• Printer

Any dot matrix model will do, with a 24 pin giving better quality than a 9 pin, obviously! If you're on the lookout for a printer, the NEC P2200 (24 pin, £460, 01 993 8111) or the Star LC-10 (9 pin, £229, 01 840 1800) are good buys. Check the mail order ads in *Express*.

• Software

There are hundreds of DTP programs out there, but here's a quick glimpse of some of the cheaper ones for your machine:

PC, ST

Timeworks DTP (GST/ Timeworks, 0954 81991, £129 PC, £99 ST)
GEM based and compatible with Bitstream fontware. Auto text wrapping, good drawing facilities. Copes with up to 999 pages!

Amiga

Publishers' Choice (HB, 0895 444433, £99)
Graphics editor, PostScript compatible – a full featured DTP program at a great price.

Archimedes

Impression (Computer Concepts, 0442 63933, £171)
Designed specifically for RISCOS, *Impression* multitasks and supports data transfer between applications. Can handle complex magazine layouts.

Amstrad PCW

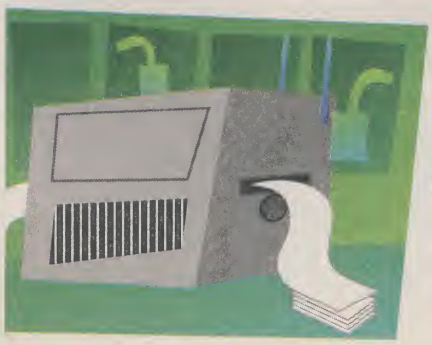
MicroDesign (Creative Technology, 0889 567160, £70)
High quality printed output from the PCW printer from this excellent value for money package. Fast, versatile and highly recommended.

Amstrad CPC, Commodore C64

Stop Press (Database, 0625 878888, £80)
Sophisticated and graphically powerful DTP with auto text flow and good range of fonts, borders etc.

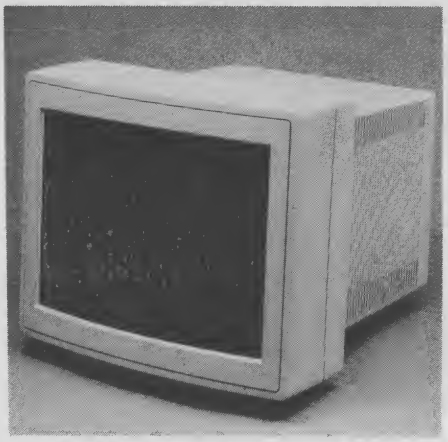
BBC

Wapping Editor (Watford, 0923 37774, £69)
64K ROM with sophisticated graphics module, typesetting software, font editor etc.



DREAM SCREENS

From 2 inch colour TVs to 20 foot motorway signs, Electronic Displays '89 had them all. Andy Storer went along to view the latest super screen from Sony



• *Looks ordinary enough doesn't it? But this Sony monitor offers 2048 x 2048 resolution on a 28-inch screen*

Two floors of Wembley's Exhibition Centre were given over to ED '89 this year; a market place for display and monitor manufacturers. The exhibition also featured vast amounts of radiation. To view some of the all-singing, all-dancing displays intended for retail stores you really needed sunglasses. But it was the new monitors on show that attracted most attention and pride of place went to the Sony Trinitron range.

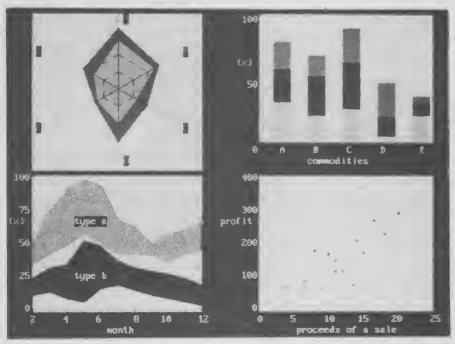
Trinitron technology has now been with us for 20 years and in that time over 40 million units have sold worldwide. Although its latest incarnations feature black and flat screens, the crucial design elements - the aperture grille and electron beam gun - remain the same. Producing a colour picture requires separate red, green and blue electron beams to be fired at a screen. Traditional systems had used three separate guns until Sony introduced the single gun, three beam system. Only one lens is needed to be used to maintain beam focus and so it could be three times the size of those in tubes requiring three separate lenses. As such, focus-precision was greatly increased, creating clearer, sharper definition.

The other innovation was in the grille design. On their way to any screen, electrons need to pass through a grille for accurate placement. Sony overhauled the competing Shadow Mask system by designing a grille of long unbroken slits. The Shadow Mask consists of a lattice - the electrons having to distort through a multitude of tiny holes before lighting up the display. Sony's solution meant that beams hit the screen exactly where they're aimed - maintaining colour purity.

To date, Trinitron screen sizes have started out as small as five-inch and peaked at 19-inch, but ED '89 featured the brand new DDM-2801 - a 28-inch monitor able to display 2048 x 2048 pixels! Intended for image processing and CAD/CAM applications, the DDM delivers the world's highest resolution displays.

LCD launches

Meanwhile, ED '89 also served as the launch platform for the world's highest resolution black and white LCD screen. Hitachi announced its catchily-named LMG9001ZZZ LCM. Combining 'advanced double layer, supertwisted nematic LCD technology with cold fluorescent lamp backlighting', the LCM is capable of handling 1120 x 780 dots on screen and is claimed to match the visual performance of CRT monitors.



• *Hi-res colour – but this is an LCD screen from Hitachi*

Hitachi was also previewing its 10-inch colour LCD - an extension of the screen used in the six-inch colour CGA portable launched at the PC Show - though this one is VGA compatible and delivers eight colours at 640x480 resolution. Don't expect a colour VGA portable until mid-1991 though.

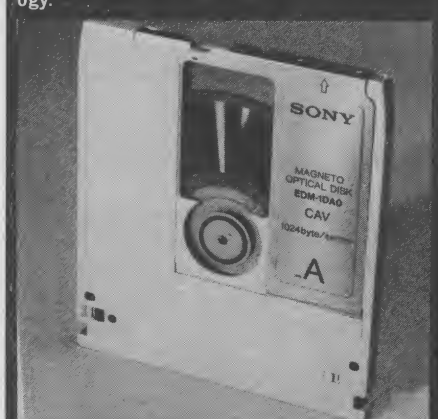
The neatest LCD on display was the new one from Epson - another highly memorable name here - the EG7500B-LS graphic LCD. Designed to replace the more bulky CRTs used for graphic displays, the EG75 is very small indeed - its viewing area a mere five inches high by four inches wide - but it can handle 320 x 200 dots and is as readable as any cathode ray based monitor.●

SONY'S RECORD OF INNOVATION

DISK DRIVES • In 1982 launched the world's first 3.5-inch disk drive - since then it's sold nearly five million and now comes in a 2Mb format.

The new two-inch format, principally designed for digital cameras, is now available for portable computers - each disk has a capacity of 1 Meg unformatted.

CD-ROM • Jointly developed with Philips, Sony can claim joint responsibility for all CD technology.



REWRITEABLE OPTICAL DISKS • The EDM-1DAO is the world's first erasable optical disk - capable of storing 325Mb on each side

DAT • Digital Audio Tape is now available as a back-up medium with Sony's DDS 1.3 Gigabyte tape drive.

WORLD'S SMALLEST 386 PC

Perdix (0959 71011) drew visitors to a stand showcasing the Quark PCIII - the world's first 80386 single board PC - the size of a 3.5 disk drive. If you were to hook this up to a Private Eye monitor you would have the ideal pocket PC. Private Eye is a computer screen less than two-inches inches square that you wear! It comes as headset attachment positioned close enough to the eye so as the display appears to be the size of a 12-inch monitor as seen from a distance of two feet. Developed in the States, but still not on sale, the revolutionary screen weighs less than two ounces and delivers a resolution of 720 x 280 pixels.

TOP TEN DISPLAY TYPES

Cathode Ray
Liquid Crystal
Light Emitting Diode
Plasma Gas
Supertwist
Incandescent
Neon Plasma
Electro-luminescent
Vacuum fluorescent
Flip Dot

SUPER SCREENS

• Contraves showed off the ultimate in large scale electro-mechanical displays. Characters 1 metre high can be viewed from as far away as 500 metres - what's more you can hook them upto your PC. Ideal if you just happen to own an airport.

• Surely the most dynamic display manufacturers on show were EEV who supply a range of monitors from its one-inch miniscan units all the way through to giant stadium Starvision screens.

• Thomas Electronics claimed the prize for the exhibition's smallest cathode ray tube - the size of a thumb nail!

• Another approach to large scale displays is that adopted by Litron who manufacture luminescent film. Characters can be laser-cut to any size or shape up to 500 feet in length and lit in four different colours.

XENON TECHNOLOGY

HAND HELD GAMES

Donkey Kong	Multi Screen	£22.45
Snoopy Tennis	Wide Screen	£17.95
Super Mario Bros	Wide Screen	£17.95
Plane & Tank		£6.25
Jet Fighter		£8.95
Gold Cliff	Multi Screen	£22.45
Climber	Wide Screen	£17.95
Highway		£6.25
Air Combat		£6.25
Balloon Flight	Wide Screen	£17.95
Soccer		£6.25
Volcano		£6.25
Space Fighter		£8.95
Donkey Kong Junior	Wide Screen	£17.95
Space Warrior		£8.95
Donkey Kong II	Multi Screen	£22.45
Mario Bros	Multi Screen	£22.45
Safe Buster	Multi Screen	£22.45
Pinball		£6.25
Bomb Sweeper	Multi Screen	£22.45

COMMODORE AMIGA SOFTWARE

The Untouchables (Ocean)	£16.45
Cabal (Ocean)	£14.95
Stryx (Psyclapse)	£12.75
Swords of Twilight (Electronic Arts)	£16.45
Dynamic Debugger (Image Works)	£16.45
Interphase (Image Works)	£16.45
Operation Thunderbolt (Ocean)	£16.45
The Lost Patrol (Ocean)	£15.75
Ooze (Dragonware)	£16.45
Fiendish Freddie's Big Top 'o Fun (Mindscape)	£16.45
Beach Volley (Psygnosis)	£15.75
Populous: Promised Lands (Electronic Arts)	£6.45
Gemini Wing (Virgin)	£12.75
Future Wars (Delphine/Palace)	£15.75
Power Drift (Activision)	£16.45
Xenon II Megablast (Image Works)	£15.45
Batman: The Movie (Ocean)	£15.75
Shadow of the Beast (Psygnosis)	£21.95
It Came From The Desert (Image Works)	£19.45
Blade Warrior (Image Works)	£16.45

ATARI ST SOFTWARE

Falcon Mission Disk Volume 1 (Mirrorsoft)	£13.45
Cabal (Ocean)	£13.45
Stryx (Psyclapse)	£13.45
Hound of Shadow (Electronic Arts)	£16.45
Dynamic Debugger (Image Works)	£16.45
Interphase (Image Works)	£16.45
Stunt Car (Micro Style)	£16.45
The Lost Patrol (Ocean)	£13.45
Ooze (Dragonware)	£16.45
Fiendish Freddie's Big Top 'o Fun (Mindscape)	£16.45
Beach Volley (Psygnosis)	£13.45
Populous: Promised Lands (Electronic Arts)	£6.45
Gemini Wing (Virgin)	£13.45
Ferrari Formula 1 (Electronic Arts)	£15.85
Gunship Editor (Xenon Technology)	£4.95
Chaos Strikes Back (FTL)	£12.99
Xenon II Megablast (Image Works)	£15.45
Batman: The Movie (Ocean)	£13.45
Elite Editor (Xenon Technology)	£9.95
Blade Warrior (Image Works)	£16.45

COMMODORE 64 SOFTWARE

	Disk	Tape
Blood Money (Psygnosis)	£8.45	£6.45
Ballistix (Psyclapse)	£8.45	£6.45
Laser Squad (Blade)	£9.45	£6.45
Beach Volley (Ocean)	£9.45	£6.45
Dragon Spirit (Domark)	£8.45	£6.45
Mr Heli (Firebird)	£9.45	£6.45
Carrier Command (Rainbird)	£9.45	£6.45
Quarterback (Virgin)	£9.45	£6.45
Stunt Car (Micro Style)	£13.45	£9.45
Super Quintet (Infogrames)	£9.45	£6.45
Super Wonder Boy (Activision)	£9.45	£6.45
Eye of Horus (Logotron)	£9.45	£6.45
Rainbow Island (Firebird)	£9.45	£6.45
Operation Neptune (Infogrames)	£9.45	£6.45
Weird Dreams (Rainbird)	£9.45	£6.45
Batman: The Movie (Ocean)	£9.45	£6.35
Shinobi (Virgin)	£9.45	£6.45
Dynamite Dux (Activision)	£9.45	£6.45
Bloodwych (Image Works)	£8.45	£6.45
Cabal (Ocean)	£9.45	£6.35

SPECTRUM SOFTWARE

	Disk	Tape
Chase HQ (Ocean)	£9.45	£6.45
Operation Thunderbolt (Ocean)	£9.45	£6.35
Laser Squad (Blade)	£9.45	£6.45
Beach Volley (Ocean)	£9.45	£6.45
Dragon Spirit (Domark)	£8.45	£6.45
Mr. Heli (Firebird)	£9.45	£6.45
Xenophobe (Micro Style)	£9.45	£6.45
Quarterback (Virgin)	£9.45	£6.45
Altered Beast (Activision)	--.--	£6.45
Super Quintet (Infogrames)	£9.45	£6.45
Purple Saturn Day (Exxos)	£9.45	£6.45
Chuck Yeager's Advanced Flight Sim (E/A)	£9.45	--.--
Rainbow Island (Firebird)	£9.45	£6.45
Risk (Leisure Genius)	£9.45	£6.45
Passing Shot (Image Works)	£8.45	£6.45
Batman: The Movie (Ocean)	£9.45	£6.35
Shinobi (Virgin)	£9.45	£6.45
Dynamite Dux (Activision)	£9.45	£6.45
Bloodwych (Image Works)	£8.45	£6.45
Cabal (Ocean)	£9.45	£6.35

AMSTRAD CPC SOFTWARE

	Disk	Tape
Ghostbusters II (Activision)	£9.45	£6.45
Shinobi (Virgin)	£9.45	£6.45
Dynamite Dux (Activision)	£9.45	£6.45
Power Drift (Activision)	£9.45	£6.45
Cabal (Ocean)	£9.45	£6.45
Batman: The Movie (Ocean)	£8.45	£6.45
Chase HQ (Ocean)	£8.45	£6.45
Laser Squad (Blade)	£9.45	£6.45
Beach Volley (Ocean)	£9.45	£6.45
Altered Beast (Activision)	£8.45	£6.45
Ballistix (Psyclapse)	£9.45	£6.45
Eye of Horus (Logotron)	£9.45	£6.45
Rainbow Island (Firebird)	£9.45	£6.45
Operation Neptune (Infogrames)	£9.45	£6.45
Weird Dreams	£9.45	£6.45
Mr. Heli (Firebird)	£9.45	£6.45
Carrier Command (Rainbird)	£9.45	£6.45
Quarterback (Virgin)	£9.45	£6.45
Bangkok Knights (Activision)	£9.45	£6.45
Super Quintet (Infogrames)	£9.45	£6.45

XENON TECHNOLOGY

Dept NCE 1B, 71 Wadham Road, North End, Portsmouth, Hampshire, PO2 9ED.

(0705) 670878

All products are dispatched within 24 hours (subject to availability) by FIRST CLASS post. All new titles are despatched when released. All prices shown are fully inclusive of VAT, Postage, Packaging and a full guarantee (please add £1.10 per item overseas). Please make Cheques or Postal Orders payable to "Xenon Technology".

We Accept EXPRESS VOUCHERS

SPECIAL OFFERS!! Any less and we'll be giving them away. "And why not?" I hear you ask. Because we're not as stupid as the competition looks!!

> **xenon** (zen', zen'on) a zero-valent element (Xe; atomic number 54), a heavy gas present in the atmosphere in proportion of 1:17 x 10E7 by volume.

> **technology** (tek 'n-o-lo'ji) the practice of any or all of the applied science that have practical value and/or industrial use: technical method(s) in a particular field of industry.

> **xenon technology** **(zen'on tek'n-o-l-lo'-ji) the best definition.**

To order simply write on a piece of paper, your name, postal address a telephone number (if possible, only used if absolutely necessary), and the software title (with the machine model). Then pop in your payment (either a cheque or a postal order) and then pop it in the post (not forgetting of course our name on the front of the envelope and a stamp.)

VAT Registration Number: 543 9020 57

Proprietor: Steve Lowe

Note: Xenon Technology is Mail Order ONLY.

Goodness gracious great balls of fire

ROCK 'N ROLL

Screen shots from Amiga version.

Tops for action skill and great music!

Rock your way around 32 enormous levels of action packed fun and tantalising skill to the lively sounds of the latest rock beats. Show your skill over treacherous precipices, irritating valve systems and tantalising teleport pads. Arm yourself with bombs, spikes, parachutes and shields and let yourself submerge into a world of fantastic animation and mind blowing sounds ... it won't be long before you've .... SOLD YOUR SOUL TO ROCK 'N' ROLL

Rainbow Arts®

CBM 64/128 & Amstrad
Cassette £9.99, Disk £14.99
Atari ST & CBM Amiga
£19.99
Spectrum
Cassette £8.99, Disk £12.99

Rainbow Arts (UK) Ltd., 65 Sketty Close,
Brackmills Business Park, Northampton NN4 0PL. Tel: (0604) 768711

BEST SHOPPING EXPRESS

- Bargains
- Advice
- Prices
- Offers
- Jobs

The *weekly* computer market place for people *serious* about buying

● THIS WEEK'S BUYERS' GUIDE

AMIGA ESSENTIALS

● The best word processors, graphics, music, databases...

JOB SHOPPING?

Check out our recruitment section inside

ALSO INSIDE

- **Take** advantage of our latest mail order offers.
- **Benefit** from our reliable buyers' guides. No waffle, just facts.
- **Gain** more than £10 off mail order prices by using Express vouchers.
- **Score** on the free reader adverts. Sell your products for *absolutely no charge!*

Save your cash, save your time

SAVE MONEY

Use these Express Vouchers with the ads inside ▶

Full details overleaf

EXPRESS VOUCHER 50p

EXPRESS VOUCHER £1

EXPRESS VOUCHER £3

EXPRESS VOUCHER £6

£399!

12MHz XT

- ✯ 640Kb RAM (Expandable to 1Mb)
- ✯ 12MHz CPU switchable to 4.77
- ✯ 102 Key Keyboard
- ✯ 360 Kb 5 1/4" Floppy Drive
- ✯ 2 Parallel Ports
- ✯ 2 Serial Ports
- ✯ Real Time Clock/Calendar
- ✯ 5/6 Free Expansion Slots
- ✯ Hercules Graphics Card & High Res Mono Monitor
- ✯ MS-DOS vers. 4.01 & GW-Basic
- ✯ Microsoft Windows
- ✯ Full Set of Manuals & Documentation

Rated 5 stars by N.C.E. Issue 43

Single Drive Complete System Mono.....£399
40Mb 30Ms Complete System MONO £599
14" EGA Colour Monitor add £226
720Kb 3 1/2" Floppy £65

£749!

16MHz AT

- ✯ 1Mb RAM
- ✯ 16MHz CPU switchable to 6
- ✯ 102 Key Keyboard
- ✯ 1.2Mb 5 1/4" FLOPPY DRIVE
- ✯ 1 Parallel Port
- ✯ 2 Serial Ports
- ✯ Real Time Clock/Calendar
- ✯ 5 Free Expansion Slots
- ✯ Mono/CGA/EGA Card Included
- ✯ High Res Mono Monitor
- ✯ MS-DOS vers. 4.01 & GW-BASIC
- ✯ Genuine Microsoft Mouse & Microsoft Window
- ✯ Full Set of Manuals & Documentation
- ✯ 1 YEAR ON SITE MAINTENANCE (Base Unit)

RATED 4 STARS BY N.C.E. ISSUE 43

Single Drive Complete System Mono £749
45Mb 25Ms Complete System MONO.....£1025
14" EGA Colour Monitor add.....£200
1.44 Mb 3 1/2" Floppy Drive add.....£85

DOLAN ELECTRONICS LTD
DANFFORDDGAR HOUSE,
CARMARTHEN, DYFED
SA32 7DU

We Accept EXPRESS VOUCHERS

We Accept EXPRESS VOUCHERS

SALES: 0267 84538
FAX: 0267 84617

All Prices ex. VAT & Delivery
C.W.O., C.O.D. AVAILABLE
(Specification Subject to change)

VISA

EXPRESS VOUCHERS - How the scheme works

● The Express voucher scheme is a unique way of enabling you to save money when you buy goods by mail order.

● It offers you a discount of up to 5% off the prices printed in many advertisments in this magazine – and remember, many of these prices are already much lower than in the shops.

● The vouchers are not limited to specific items - you can save on *any* purchase from one of the participating advertisers.

● Most of our advertisers are taking part in this scheme – just look for this sign.

● Remember. By using this scheme you will almost *always* be able to buy goods cheaper from New Computer Express than anywhere else.

£1 voucher. Valid for orders above £20

This voucher may be used as £1.00 part payment on any order totalling over £20 from a participating advertiser in New Computer Express. You simply fill in the details below and send it off with your order.

NAME _____
ADDRESS _____
_____ TEL. _____
ITEM PURCHASED _____

One voucher per order only. Voucher and order must reach the advertiser before **9am Monday Nov 13th**

50p voucher. Valid for orders over £10

This voucher may be used as 50p part payment on any order totalling over £10 from a participating advertiser in New Computer Express. You simply fill in the details below and send it off with your order.

NAME _____
ADDRESS _____
_____ TEL. _____
ITEM PURCHASED _____

One voucher per order only. Voucher and order must reach the advertiser before **9am Monday Nov 13th**

£6 voucher. Valid for orders over £120

This voucher may be used as £6.00 part payment on any order totalling over £120 from a participating advertiser in New Computer Express. You simply fill in the details below and send it off with your order.

NAME _____
ADDRESS _____
_____ TEL. _____
ITEM PURCHASED _____

One voucher per order only. Voucher and order must reach advertiser before **9am Monday Nov 13th**

£3 voucher. Valid for orders over £60

This voucher may be used as £3.00 part payment on any order totalling over £60 from a participating advertiser in New Computer Express. You simply fill in the details below and send it off with your order.

NAME _____
ADDRESS _____
_____ TEL. _____
ITEM PURCHASED _____

One voucher per order only. Voucher and order must reach the advertiser before **9am Monday Nov 13th**

THE FIVE SIMPLE RULES

1.Express vouchers can be used to obtain discounts on purchases of goods advertised in this issue of *New Computer Express*, **provided** that they are bought directly from an advertiser taking part in the scheme. The vouchers are valid only for those advertisements which say *"We accept Express vouchers"*.

2. Each voucher entitles you to a discount at the voucher's face value, **provided** that your overall order level is **higher** than the figure indicated on the back of the voucher.

3. To use a voucher, simply enclose it with your discounted payment when you order. You may use **only one** voucher in any one order.

4. The order including the voucher must be received by the advertiser before the closing date printed on the voucher.

5. You must fill in the details on the voucher.

THE SHOPPING EXPRESS BUYERS' GUIDE TO AMIGA ESSENTIALS

Although the Amiga is often regarded as the best machine for games and graphics, it has a much wider range of capabilities. It can produce excellent sound and can handle everything from word processing and databases to desktop publishing and video titling.

The Express Guide to Amiga essentials will take you through the best buys for your Amiga and help you plough through the seemingly infinite range of useful utilities and breathtaking games, so that you can get the most out your all singing, all dancing computer.

WORD PROCESSORS

● PROTEXT

Arnor 0733 68909
£99.95
It's fast and easy to use – has a good spellchecker and even has a calculator built in for doing tedious sums. Text can be viewed in WYSIWYG mode too. Keyboard can be configured to execute a stream of commands at the press of a key.

▲ Word count, many block commands and calculator
▲ Powerful spellchecker
▲ Can work on two documents simultaneously

▼ Not beginner-friendly

● KIND WORDS

Amiga Centre Scotland 031 557 4242
£49.00
Produces the best printer output of any word processor on the Amiga thanks to special output modes which simulate near letter quality. Has lots of good printer drivers to exploit even the most simple of printers.

▲ Excellent printer output
▲ Graphics can be imported

▼ Lacks a word count unless you spell check

● SCRIBBLE

HB Marketing 0895 444433
£99.95
A simple to use word processor with spell checker and mail merger. Reformats text as you type. Although it lacks graphical functions, its simplicity makes it an excellent word processor.

▲ Simple to use
▲ Mail merge and spell checker

▼ Can't import graphics

● WORD PERFECT

Sentinel
£293.25
A hefty 500 page manual teaches you how to use Word Perfect. A huge spellchecker dictionary and a thesaurus add to the bundle. Can call up a command line interpreter from within the program.

▲ Word Perfect is used on many machines so it's useful if you're familiar with it

▼ Expensive otherwise and lacks graphical commands

SPREADSHEETS

● SUPERPLAN

Precision 01 330 7166
£99
Comes complete with a tutorial disk to help get you started – all the functions you're likely to need in a spreadsheet and also has excellent graphics display which makes data more digestible

▲ Macro language allows keyboard configuration
▲ Plenty of graphics functions
▲ Good find/replace database facilities

▼ Requires 1Mb of memory
▼ Awkward to use because of poor use of menus

DATABASES

● SUPERBASE 2

Precision 01 330 7166
£99.95
Simple to use, even for a beginner. Data can be imported from other files easily. Excellent data validation and useful help messages can be included. Mail merge facilities.

▲ Excellent tutorial files
▲ Graphics can be included and saved with the database

▼ Not cheap

● SUPERBASE PROFESSIONAL

Precision 01 330 7166
£249.99
The most powerful relational database available. Designed beautifully so that setting up a database is simplicity itself. Also incorporates a 200 command word programming language.

▲ No limit to field size or number of records
▲ The Rolls Royce of databases

▼ Even less cheap

DESKTOP PUBLISHING

● PROFESSIONAL PAGE V1.2

HB Marketing 0895 444433
£129.95
Produces PostScript compatible files for use by laser printers and typesetting bureaux – can also produce colour separations. English, French and Spanish dictionaries in the spellchecker. Five magnifications including life size and 200%. Probably the best and most sophisticated DTP package on the Amiga.

▲ PostScript compatible files
▲ Colour separations can be created
▲ Three dictionaries

▼ Requires 1Mb of RAM
▼ Two drives strongly recommended

● SHAKESPEARE

Cloudhall Ltd 0604 231 2111
£99
Clear and informative manual. Produces colour pages directly on colour printers. Has some problems with large documents so best used on single pages. Graphics can be imported and each retains it's palette. Postscript compatible.

▲ Ideal if you have a colour printer
▲ IFF file import

▼ No magnify function
▼ PostScript output is only in grey scale
▼ Graphics can't be edited on the page

● PUBLISHERS CHOICE

HB Marketing 0895 444433
£99.95
A combination of three programs: Pagesetter, Laserscript and Kindwords. The latter is a word processor with both a spellchecker and thesaurus – just in case you get lost for words. Laserscript is a utility for converting Pagesetter files to PostScript format and printing them. Pagesetter includes a mini graphics package to help the page creation process. Excellent manual.

▲ Includes powerful wordprocessor – Kindwords
▲ PostScript compatible
▲ Graphics capabilities in Pagesetter

DATAPLEX

We Accept EXPRESS VOUCHERS

10 Petersfield Avenue, Slough,
Berkshire SL2 5DN
Tel: 0753 35557
All prices excluding
VAT and delivery

We Accept EXPRESS VOUCHERS

Access

VISA

AMIGA HARDWARE

Amiga 500 Complete £279
Amiga 500 + TV modulator £289

NEW BATMAN PACK £317

New from Amiga
Includes: TV modulator, 3.5" Disk Drive with Amiga DOS Kickstart, Workbench and the very first software also includes Batman The Movie game, F18 Inceptor, Paint 2, New Zealand Story, + Free mouse mat.

AMIGA ACCESSORIES

Amiga A501 RAM pack.....£99
Amiga joystick.....£8
TV Modulator.....£19
Phillips CM8833 colour monitor.....£199
Phillips BM7502 12" green monitor.....£79
Phillips BM7522 12" amber monitor.....£89
Amiga To Philips cable.....£8

AMIGA DRIVE

1 Meg 3.5" external.....£68
1 Meg 3.5" internal.....£63
1 Meg 5.25" external.....£99

ATARI COMPUTERS

520 STFM Explorer Pack.....£229
520 STFM Power Pack.....£309
1040 STFM Professional Pack.....£379
SM124 mono monitor.....£99
CS1224 colour monitor.....£229

ATARI DRIVES

1 Meg 3.5 external.....£80
1 Meg 5.25 external.....£99
1 Meg 3.5 internal.....£63

STAR PRINTERS

Star LC10 mono.....£135
Star LC10 colour.....£168
Star 2410.....£199
Star LC15 9 Pin 136 column.....£264
Star LC2415 24 Pin.....£328

EPSON

Epson LX400.....£145
Epson LQ550.....£255

Many More Epsom In Stock. Please call for prices.

PANASONIC

Unbeatable Prices!

Panasonic 1081.....£125
KXP 1124.....£239
KXP 1180.....£144

CITIZEN PRINTERS

Citizen 120D.....£115
Citizen 180E.....£127
Swift 24.....£255
Colour upgrade for Swift.....£42

MANNESMAN TALLY

Mannesman MT 81 Dot Matrix.....£110
Mannesman Sheetfeeder.....£62
Mannesman Serial Interface.....£49

REPAIRS FOR AMIGA AND ATARI

▼ Font and hyphenation information not imported with text

● CITY DESK

Precision 01 330 7166
£130.39+VAT

A very powerful DTP package, but suffers a little from unfriendliness. Style codes are imported when the text is. Includes a simple graphics editor which can be used to create or edit IFF files for use on the page.

▲ PostScript output is supported
▲ Text can be edited on the page

▼ Lacks a WIMP environment

● PAGESTREAM

Silica Systems 01 309 1111
£171.35

Text can be flowed around graphics in most DTPs, but Pagestream has the edge in that respect – text can be flowed in many ways. Magnification is not limited to five sizes – you can work at virtually any magnification.

▲ Flexible text flowing
▲ Large and easy to edit spell check dictionary

▼ Difficult to produce colour separations

GRAPHICS

● PHOTON PAINT 2

Microillusions 0703 703030
£89.95

Art package capable of producing HAM images. Comprehensive set of tools allowing re-scaling, flipping, rotation, bending stretching and much more.

▲ Wide range of tools for image manipulation

▼ But some are very slow to use

● DIGIPAINT 3

Newtek/Precision 01 330 7166
£69.95

HAM art package with facility to create images up to 1024 by 1024 pixels – the only limitation being memory. Good text entry system which uses a buffer. Text is manipulated before it's put on screen as a brush. Friendly interface between package and user

▲ Good text manipulation
▲ Huge images possible

▼ No fill or airbrush
▼ Awkward magnify mode

● DELUXE PAINT III

Electronic Arts 0753 49442
£79.95

Excellent art package that allows use of full overscan and extra halfbrite screens. Simple animations can be created too – very easy to do. Stencil mode stops you from accidentally airbrushing over the wrong part of the screen.

▲ Perspective fill
▲ Halfbrite Mode
▲ Full overscan screen

▼ 1 Mb required
▼ HAM not supported

● FANTAVISION

Domark 01 780 2222
£39.99

Uses polygons to create animated objects and relies on tweening to create the illusion of movement. Full colour IFF files can be imported to make up the background scenery.

▲ Fast animated sequences that don't eat up much memory
▲ One object can be easily transformed into another

▼ Objects are silhouettes

● MOVIE SETTER

HB Marketing 0895 444433
£69.95

Uses a series of sprites to create animations which are more cartoon like in nature than Fantavision. Sprites can be brushes created with most art packages – they're in IFF format. Storyboarding makes it easy to use and see what's going on. Animation can be played, rewound and stepped through frame by frame.

▲ Minor changes to productions can be viewed instantly
▲ Sound is easily integrated

▼ Works best with 1Mb
▼ Eats up memory if not careful

● PIXMATE IMAGE PROCESSOR

£43

Allows pictures to be transformed from one form another – HAM can be reduced to 32 colour pictures for example. Images can be cleaned up, defocused, squashed or stretched.

▲ Converts images from one format to another
▲ Wide range of cleaning options

▼ But who the hell distributes it?

● X-CAD

Commodore 0628 770088
£199.95

Very fast re-drawing of images. Has great potential in the range and qualities of images that it can produce. Hardware requirements mean that you must be very serious about your CAD to justify buying it.

▲ Best CAD package available
▲ Fast
▲ Comprehensive

▼ Needs 2Mb
▼ Better with hard drive

● INTRO CAD

HB Marketing 0895 444433
£59.95

Extensive colouring routines enable realistic and detailed objects to be created. Easy to include text too. Ideal as an introduction to CAD

▲ Simple to use and much cheaper than X-CAD
▲ Excellent results can be obtained with a

TREBLE H COMPUTING

ATARI

★ NEW ★ POWER PACK PLUS
ATARI 520 STFM 1 MEG DRIVE

FIRST BASIC, ORGANISER, FIRST MUSIC, XENON, DOUBLE DRAGON, NEBULUS, ELIMINATOR, OUT-RUN, GAUNTLET II, SUPER HUEY, AFTERBURNER, R-TYPE, PREDATOR, SUPER HANG-ON, BLACK LAMP, STARGLIDER, SPACE HARRIER, BOMB JACK, OVERLANDER, PACMANIA, STAR GOOSE, STAR RAY, BOMBUZAL.

+ JOYSTICK + 80 CAP. DISK BOX
+10 x 3 1/2" DS DD DISKS
+ MOUSE MAT

ALL FOR ONLY
£369.99

ATARI 520 STFM 1 Meg Drive	£269.99
ATARI 520 STFM 1 Meg Drive + Super Pack	£349.99
* NEW* ATARI 520 STFM 1 Meg Drive + Power Pack	£349.99
ATARI 1040 STFM + Professional or Games Pack	£439.99
ATARI 1040 STFM + Steinberg Pro-12	£439.99
* NEW * MEGA 1 ST Inc. Professional Pack	£519.99

ADD £99.99 TO INCLUDE SM124 MONO MONITOR WITH ANY OF ABOVE

AMIGA 500 Inc. Modulator	£359.99
AMIGA 500 + 1/2 RAM Expansion	£489.99
AMIGA 500 + 1084S Med. Res. Colour Monitor	£589.99
B2000 + XT Bridgeboard + A2040 20 Mb Hard Drive + 1084S Monitor	£1499.00
AMIGA Art & Animation Pack Amiga 500 + 1/2 Meg Expansion + Deluxe Paint III	£549.99

AMIGA

NEW ★ SPECIAL PACK

AMIGA 500 INC MODULATOR
WORKBENCH 1.3 AND MANUALS
11 GAMES
80 CAPACITY DISK BOX
20 x 3 1/2" DISKS
MOUSE MAT
DUST COVER

ALL FOR ONLY
£389.99

ACCESSORIES

Amiga A501 RAM Upgrade	£129.99
Workbench 1.3	£13.50
Joystick/Mouse Extension	£5.50
Disk Drive Cleaner (3.5 or 5.25)	£4.95
Mouse Mat (Soft)	£4.50
ST or Amiga Dust Cover	£6.50
Amiga to Scart Lead (Not Sony)	£9.95
ST to Scart Lead	£9.95
Quickshot II Joystick	£8.50
DCOMJoystick (Fully Microswitched)	£9.95
Competition Pro 5000 (Black)	£11.50
Competition Pro 5000 (Clear)	£12.50
50 x 3.5" Disk Labels	£1.20
80 Capacity 3.5" Disk Box	£6.50
Monitor Covers From	£6.95
Konix Speedking	£10.50
Konix Navigator	£12.25

GAMES SOFTWARE

ST SOFTWARE

TV Sports	£16.50
Oil Imperium	£16.50
Paperboy	£13.50
Fast Lane	£13.50
Stunt Car Racer	£16.50
Batman the Movie	£16.50
The Games Summer Ed.	£16.50
Laser Squad	£13.50
Falcon	£16.50
Falcon Mission Disk	£13.50
Centerfold Squares	£13.50
Continental Circus	£16.50
Emperor of the Mines	£16.50
Ferrari Formula 1	Phone
Gridiron	Phone
KnightForce	Phone
North & South	£16.50
Paul Gascoigne Super Soccer	Phone
Fighting Soccer	£13.50
Stunt Car Racer	£16.50
Super League Soccer	£16.50
Indy & Last Crusade Adv.	£16.50
Dragon Spirit	£13.50
Eye of Horus	£16.50
Iron Trackers	£13.50
Altered Beasts	£13.50
Action Fighter	£16.50
RVF Honda	£16.50
Hate	£13.50
Shinobi	£13.50

AMIGA SOFTWARE

Centerfold Squares	£13.50
Batman the Movie	£16.50
Continental Circus	Phone
Laser Squad	£13.50
Shadow of the Beast	£26.99
Xenon II	£16.50
Altered Beast	£16.50
Gretzky Hockey	£16.50
Shinobi	£13.50
Falcon	£16.50
Falcon Mission Disk	£13.50
Swords of Twilight	£16.50
Shufflepack Cafe	£13.50
Stunt Car Racer	£16.50
Paul Gascoignes Super Soccer	Phone
North & South	£16.50
Never Mind	Phone
KnightForce	Phone
Gridiron	Phone
Fighting Soccer	£13.50
Emperor of the Mines	£16.50
The Games Summer Ed.	£16.50
Demon's Tomb	Phone
Fast Lane	£13.50
Eye of Horus	£16.50
Beach Volley Ball	£16.50
Chessmaster 2150	£16.50
Paperboy	£13.50
Indy Arcade	£16.50

MONITORS

ATARI SM 124	£109.99
ATARI SC 1224	£264.99
COMMODORE 1084S	£259.99
PHILIPS 8833	£229.99

DRIVES

CUMANA 1 MEG 3.5" for ST	£89.99
CUMANA 1 MEG 3.5" for Amiga	£89.99
NEC 3.5" for ST	£94.99
NEC 3.5" for AMIGA	£84.99
PCML 5.25" for ST	£134.99
CUMANA 5.25" for AMIGA	£134.99

PRINTERS

STAR LC10 inc Cable +2 ribbons	£175.00
STAR LC10 colour inc Cable	£215.00
CITIZEN 120/D inc Cable	£139.99
EPSON LX800	£189.99
STAR LC 24/10 inc Cable	£269.99

HARD DRIVES

THIRD COAST, ATARI, SUPRA AND COMMODORE A590, VORTEX AVAILABLE. PLEASE CALL FOR
*** BEST PRICES ***

MUSIC AND SOUND

ST

Steinberg Pro-24	£249.95
C-Lab Creator	£239.99
C-Lab Notator	£359.99
EZ Track Plus	£49.95
Edit Track	£199.99
Super Conductor	£39.99
Pro Sound Designer	£49.99
ST Replay 4	£64.99

AMIGA

Aegis Sonix V.2	£49.95
Aegis AudioMaster II	£59.95
Amas	£77.99
Future Sound	£79.95
Pro Sound Designer Gold	£74.99
Eidersoft Midi Interface	£24.95
Datel Midi Interface	£34.95
Music X **Out Now!**	£189.99
Dr T's KCS	£159.99
Dr T's Midi Recording Studio	£52.95
Deluxe Music	£59.95

DISKS

TOP QUALITY 31/2" DS/DD GUARANTEED BULK DISKS

NEW PRICES

10	£7.50
25	£16.90
50	£32.25
100	£62.50
200	£123.00

INCLUDING LABELS. Add £5.50 for 80 Capacity Disk Box when ordering disks or £4.50 when ordering 50 or more Disks

ART & ANIMATION

ST

Degas Elite	£19.95
Cyber Paint 2	£54.95
Cyber Studio CAD 3D	£69.95
Spectrum 512	£44.95
Quantum Paint Pro	£32.95

AMIGA

Lights, Camera, Action	£47.95
Zoetrope	£79.95
Aegis Videoscape 3D	£109.99
Comic Setter	£44.99
Mini-Gen (Genlock)	£99.99
Moviesetter	£56.99
Deluxe Paint III	£59.95
Photon Paint II	£69.99

ATARI PORTFOLIO POCKET PC

NEW

Pocket sized PC with 128K internal RAM. 256K ROM containing B105 operating system and full applications suite. 200 mm x 105 mm x 29 mm casing opens to reveal 40 col x 8 lines LCD screen and 63 keys with buried numeric keypad.

Built in applications include:

Lotus 1-2-3 File Compatible Spreadsheet Spreadsheet with 127 Col x 255 ROM worksheet. Calculations by natural order read and writes Lotus version 1 and 2.01 files. 123-like commands supported such as range move, copy, titles, column and ROM insert/delete.

Diary Comprehensive calendar and diary. "Wake-up" alarms even when switched off. Repeat entries daily, weekly or yearly. fast entry and movement of appointments.

Address and Phone Book Card index system. Automatic finding and dialling of any numbers V.A DTMF tone dialer. Entries sorted on entry and can be selected into different catagories.

Calculator Multiple display formats and memories. Factorial, power and root functions. Calculations can be reviewed and edited.

Editor Comprehensive and easy to use text editor. Optional word wrap at any column width. String search or replace.

Other Features Compatible with MS-DOS 2.11. Select screen between 40✱ 8 and 80✱ 25 mode. RAM expandable to 640K - internal RAM disk configurable from 8K.2 way file transfer with a PC and printing using the parallel port auto switch off screen contrast control.

£249.99

All prices include VAT. Please send Cheques/PO made payable to:-

TREBLE H COMPUTING
DEPT NCE, CROMER HOUSE,
CAXTON WAY, STEVENAGE,
HERTS. SG1 2DF

★ CREDIT CARD HOTLINE: 0438 361738 ★
FAX: 0438 740 794

If you do send cash please send it Registered.
All Goods are sent First Class/Registered. Please add £3.00 for outside U.K.
Large Orders ie. Amigas, ST, Monitors etc are always sent by courier.
Please add £6,00, if you require Next Day Courier Delivery on other items.

All prices are correct at time of going to Press, and are subject to change without prior notice

MAIN MEDIA

FREEPOST, ANDOVER, HANTS, SP10 3BR.

Tel: 0264 333830 (24 hrs)

We Accept Express Vouchers

★ ★ UNBRANDED LIFETIME GUARANTEE ★ ★

	QUANTITY	10	20	30	40	50	100
3 1/2" SS/DD	135TPI	£7.95	£15.50	£22.75	£29.50	£35.75	£69.95
3 1/2" DS/DD	135TPI	£8.50	£16.50	£23.95	£31.25	£37.95	£74.95

	QUANTITY	25	50	100	250	500
5 1/4" DS/DD	48TPI	£7.25	£13.95	£26.95	£64.95	£124.95
5 1/4" DS/QD	96TPI	£7.95	£15.50	£29.95	£77.50	£139.95

All 3 1/2" Disks come complete with labels. All 5 1/4" Disks supplied with Write Protect Tabs, Labels and Envelopes and come with our No Quibble Money Back or Replacement Guarantee.

DISKETTE STORAGE BOXES

		Price Each
50 x 5 1/4"	Hinged Lid Lockable	£5.50
100 x 5 1/4"	Hinged Lid Lockable	£7.50
140 x 5 1/4"	Hinged Lid Lockable	£9.50
50 x 3 1/2"	Hinged Lid Lockable	£5.50
100 x 3 1/2"	Hinged Lid Lockable	£7.50

DISK BOXES WITH DISKS

50 x 5 1/4"	Hinged Lid Lockable with	25	DS/DD	48 TPI	£11.95
50 x 5 1/4"	Hinged Lid Lockable with	25	DS/QD	96 TPI	£12.75
100 x 5 1/4"	Hinged Lid Lockable with	50	DS/DD	48 TPI	£20.95
100 x 5 1/4"	Hinged Lid Lockable with	50	DS/QD	96 TPI	£22.50
140 x 5 1/4"	Hinged Lid Lockable with	100	DS/DD	48 TPI	£35.95
140 x 5 1/4"	Hinged Lid Lockable with	100	DS/QD	96 TPI	£38.95
50 x 3 1/2"	Hinged Lid Lockable with	20	DS/DD	135 TPI	£21.50
100 x 3 1/2"	Hinged Lid Lockable with	50	DS/DD	135 TPI	£44.95

All prices include VAT and Carriage. All Goods despatched within 24 hours subject to availability.

Cheques/P.O.'s to:
MAIN MEDIA, Dept NCE, FREEPOST,
ANDOVER, HANTS, SP10 3BR
Telephone: Credit Card Hotline: 0264 333830 (24 hrs)

VISA

ALL PRICES INCLUDE VAT AND DELIVERY!

LC24-10 EX STOCK!

AMIGA

NEW!
A500 BAT-PACK
INCLUDES:
BATMAN THE MOVIE
NEW ZEALAND STORY
F18 INTERCEPTOR
'D' PAINT II
WORKBENCH 1.3
KICKSTART 1.3
AMIGA BASIC
DESKTOP UTILITIES
NEW TUTORIAL PACK
TV MODULATOR
£369.00
WITH TENSTAR PACK
£399.00

3.5" DRIVES

NEW!
EPSON PRO SERIES
ST VERSION - £129.00
AMIGA VERS - £109.00
CUMANA MICRODRIVES
ST VERSION - £94.95
AMIGA VERS - £84.95

MISC

1 MEG UPGRADES-£94.95
3.5" DS-DD DISKS
10 = £7.45
50 = £32.00
100 = £62.00
200 = £120.00
ADD £6.50 FOR 100
3.5" DISK BOX

PRINTERS

STAR
LC-10 B/W -- £154.00
LC-10 II ---- £175.00
LC-10 COLOUR- £197.00
LC24-10 LQ -- £235.00
LC15 B/FEED- £309.00
LC24-15 LQ -- £385.00
FR-10 300CPS- £359.00
XB24 48P EMU- £459.00
CITIZEN
120D B/W ---- £134.00

ATARI

520 STFM
POWER PACK
£347.00
520 STFM
EXPLORER PACK
£269.00
1040 STFM
HYPER ART PACK
WITH BORRODINO
3D STRATEGY GAME
£439.00
ST MEGA 1
BUSINESS PACK
£519.00
MEGA 1 PACK
WITH
SM124 MONITOR
£609.00

AMIGA XMAS
STARTER KIT
59.95
INCLUDES
KINDWORDS WORD-PROCESSOR
WITH 100,000 ONLINE SPELL CHECKER
470,000 WORD THESAURUS
COLOUR GRAPHICS AND PROFESSIONAL TYPEFACES
SUPPORTS LC10 COLOUR PRINTER
FUSION PAINT
AN ADVANCED FEATURE PACKED ART PACKAGE
CRAZY CARS / MINIATURE GOLF / SUPER SKI
THREE TOP QUALITY ARCADE GAMES
** ALL PACKED IN ONE PRESENTATION BOX **

FREE!! UTILITIES AND TOOLS PACK WITH EVERY ST PURCHASE
SOFTWARE BLITTER, ST DIAGNOSTICS, DISK EDITOR / CUSTOM FORMATTER, DISK BOOT CONSTRUCTION SET, ALARM CLOCK, QUICK FORMATTER, CALCULATOR, CUSTOM FORMAT DISK DUPLICATOR, PRINTER CUSTOMISER TOOL, DESKTOP GAMES, ARC CONSTRUCTION SET, SYSTEM SELECTOR, 50/60 HZ SWITCHER AND SYNCRONIZER SNAPSHOT DUMPER, RAM/PRINT SPOOLER, WORD-PROCESSOR AND MUCH, MUCH MORE!!

DEDUCT 2% FOR CASH, CHEQUE OR POSTAL ORDER PAYMENT

COMPUTERHOUSE UK
TEL:01-731-1276
14 ROMILY COURT, LANDRIDGE ROAD, FULHAM, LONDON SW6 4LL
EST. 1986
ACCESS MASTER CARD EURO CARD VISA

bit of skill

▼ Not as comprehensive as other packages

● SCULPT 4D

Amiga Centre Scotland 031 557 4242
£368

Creating 3D ray traced animations can be very satisfying, and Sculpt 4D is an excellent tool for doing just that. Adding text to the animations is considerable more easy than in the previous incarnation, Sculpt 3D. Sculpt Animate is also included in the price.

▲ Produces excellent raytraced pictures
▲ Sculpt animate included in the price

▼ Expensive unless you're a real raytracing fanatic

● DELUXE PRINT II

Electronic Arts 0753 49442
£49.95

Drawing masterpieces isn't a problem with art packages, but adding text to images can be. Deluxe Print II is ideal for this though. It's easy to create signs and posters with some lovely large fonts. It even has an automatic calendar generator.

▲ Range of large fonts
▲ Can produce larger-than-screen posters

▼ Doesn't support 24 pin printers

MUSIC

● MUSIC X

SDL 01 300 3399
£199+VAT

Combines the features of a sequencer, voice programmer, sampler and MIDI interpreter. Supported by an excellent manual. The most comprehensive and competent music package available.

▲ 255 tracks possible
▲ Very detailed
▲ Beats ST MIDI software at its own game

▼ 1Mb recommended

● TRACK 24

Soundbits 021 733 2063
£75

This is a 24 track sequencer with the last two tracks having a special purpose. Track 23 is used for backing chords and track 24 is monophonic and used to play the main melodies or lead lines. Very simple to use and has lots of functions.

▲ 24 tracks
▲ Easy to use

▼ Lacks powerful features

● FUTURESOUND 500

Applied Visions (UK)
£79.95

Simple to use sound sampler with routines to use the samples in your own C or Basic programs. Manual is easy to read, but may give novices a hard time.

▲ Just plug in and away you go
▲ provision for including samples in your programs

▼ Manual a little tricky for the beginner

● REALTIME SOUND PROCESSOR

HB Marketing 0895 444433
£84.95

Not only a high quality sound sampler, but also a sound processor too. Add echo, reverb, delay and so on to your sampled sounds and you'll be producing Paul Hardcastle style sounds in no time at all.

▲ Sound processor for customising your samples

▼ Only 8-bit samples which sound a little hollow

● AMAS

Microdeal 0726 68020
£99.95

Sound can be digitised from a microphone or an amplified source which is unusual in samplers. The results can be played across a midi keyboard too.

▲ Samples can be compressed
▲ MIDI ports included

▼ No facility for using samples in your own programs

● OPUS-1 MCL

Ariadne Software 01 960 0204
£99.95

A computer language designed specifically for musical composition. Can be used by programmers that lack instrument skill. Complex language, but powerful when learnt.

▲ Ideal for the programmer with little musical ability

▼ Complex language to learn
▼ Not cheap

GAMES

● INTERPHASE

Mirrorsoft 01 928 1454
£29.99

Fantastic 3D graphics and a Max Headroom style plot make Interphase a challenging and exciting game. Guide your girl friend through a multi-storey building and retrieve a vital computer disk. Lots to do and not much time to do it in.

● XENON 2

Mirrorsoft 01 928 1454
£24.99

The Bitmap Brothers first produced Xenon which had all the qualities you could ask for in a shoot-'em-up. Xenon II takes the genre one step further to produce the best zap-'em game of the year. Hordes of aliens and a multitude of bolt on weapons to bring the evil Xenites to an end. Sound is as good as the graphics.

● STRIDER

US Gold 021 625 3388
£19.99

An excellent conversion of the Capcom

More High Quality Software Tools from HiSoft...

High Quality Software High Quality Software High Quality Software High Quality Software High Quality Software High Quality Software High Quality Software

HiSoft BASIC

The BASIC language has come a long way since its humble beginnings in the early 1960s and the AmigaBASIC interpreter supplied with your computer is witness to this transformation. However, although AmigaBASIC is good, you can do even better ... with HiSoft BASIC.

HiSoft BASIC is a complete, fully up-to-date, integrated BASIC development system with the massive advantage of having a compiler built in so that you can transform your programs to super-fast machine code as easily as running an AmigaBASIC program.

Features

- Fully AmigaBASIC compatible so that you can use all the programs you have already written and all the publicly available ones ... immediately.
- Modern, structured programming features like: long IFs, multi-line functions, sub-programs, REPEAT, WHILE, DO, CASE etc.
- No limits: no program size limit and no limits on the size of any variable (except by memory).
- Full recursion in both sub-programs and functions with local and global variables, arrays as parameters etc.
- Integrated editor with English error messages.
- Link your BASIC code with C and assembler for total flexibility, speed and power.
- Compatible with Microsoft QuickBASIC 3 on the PC.

Manual

HiSoft BASIC comes with a proferssional 350-page ring-bound manual which contains a full tutorial and, for a limited time, we are supplying the Abacus book *AmigaBASIC Inside & Out* plus its examples disk (a total value of at least £25), absolutely free of charge!.

Price

HiSoft BASIC Amiga £79.95 inc.

Lattice C ver 5

We are delighted to be handling the best range of C programming tools currently available on the Amiga.

Lattice C 5 and Lattice C++ are now widely regarded as the ultimate C compilers - no others give you faster, more efficient programs ... and no other product gives you a more complete programming environment or a more impressive set of features:

Features

- Fully standard Amiga Compiler, with many ANSI features, including ANSI preprocessor, const and volatile keywords and function prototypes.
- Powerful source level debugger to speed up debugging, without slowing you down, with access to all of your variables and full control over your program's execution.
- Support for all 68000 series processors including the 68030 and 68882.
- High performance global optimiser using state of the art techniques not previously seen on the Amiga, including moving calculations out of loops, automatic assignment of variables to registers, elimination of unused code and variables.
- Full set of programmer utilities to increase the flexibility of your development environment.
- Blink overlay linker, the standard Amiga linker.
- Pre-compiled header files give increased speed by eliminating repetetive analysis.
- Many built in functions to allow generation of inline code increasing the speed of your programs yet further.
- Fully re-entrant and multi-tasking compiler, plus facilities to build resident modules.
- Comprehensive two volume manual with many examples and sample files.

Requires

- Lattice C 5 runs on the A500 up but will certainly benefit from 1Meg of RAM and, for large programs, a hard disk.
- Lttice C++ needs 1.5Mb memory and a hard disk.

Price

Lattice C 5.02 £229 inc., **Lattice C++** £299 inc.

HiSoft Devpac ver 2

We've said enough in this ad, let's hear what the press have to say about Devpac Amiga:

Editing, assembling, debugging and even program execution from the same place - not fantasy but something offered by Devpac. Fast assembly speed, powerful directives for optimising code, extensive conditional options, symbolic debugging ... Devpac has it all plus a lot more. It's packed with features and has everything machine code program developers could want.

ST/Amiga Format 12/88

With release 2 of Devpac Amiga, HiSoft has greatly enhanced its already excellent 68000 development system, making it quite indispensable for the serious programmer.

Transactor 5/89

Price: Devpac Amiga 2 £59.95 inc.

HiSoft
High Quality Software

The Old School • Greenfield
Bedford • MK45 5DE
Fax (0525) 713716 • Tel (0525) 718181
Access & Visa Orders welcome

WESTONING LTD

3½	25	50	100	200	400
880K	£17	£31	£60	£115	£225
2Mb	£32	£60	£118	-	-

5¼	25	50	100	200
DS/DD	£8	£12	£22	£40
DS/HD	£14	£25	£48	£90

DISKS CERTIFIED 100% ERROR FREE

DISK BOXES

Hinged Lockable
3½" or 5¼"
Capacity 50 £3.75 100 £6.50
Add £2 P&P if not ordered with disks

VISA

Access

ACCESSORIES

Mouse Mat £2.99
Ribbon Refresh £6.50
1000 Disk Labels £10.00
Cheetah 125 Joystick.....£5.50

AMIGA

A500 Modulator & Mouse £346
A500 Batman Pack.....£349
A500 Air Miles Pack £405
512K **RAM** Pack.....£75
31/2 External Drive.....£86
20Mb Hard Disk.....£346
40 Mb Hard Disk.....£480
A1084 Colour Monitor.....£260

Add £6 for next day delivery

ATARI

Ultimate Pack £420
Ultimate & Mono Monitor.....£504
Power Pack £336
Portfolio £210

Add £6 for Next Day Delivery

ALL UK STOCK! | SAME DAY DESPATCH NO QUIBBLE GUARANTEE | Prices include VAT & Carriage

Department NCE, 12 Sanderson Road, Westoning, Bedford, MK45 5JY.
Tel: (0836) 775060 or (0525) 718668

MENTION TECHNICAL SERVICES

THE NEW SEGA MEGADRIVE!
ONLY £199.95 with FREE Game
(Altered Beast, Space Harrier II, Alex Kidd, Super Thunderblade).

NOTE: This machine is Pal Composite so ALL WORK WITH PAL AND RGB. (Scart, Amstrad etc).

NOTE: Unlike other Companies' inferior imports this machine does not overload the data bus so all future peripherals will work (Ask about leads hanging from other machines!!)

INCLUDES: 1 Year Guarantee, Full UK Instructions, will also run ALL future Sega Cartridges.

This is the only Machine which currently runs the American (Genesis) range of software and any future releases.
It also works with the NEW "Personal Arcade Plus" Machine!

0803 404146
0436 78827
All Major Credit Cards Accepted

NEW PC ENGINES IN STOCK NOW. RING FOR DETAILS

Enquiries: For Full List of Hardware/ Software, send a Large SAE to:
MENTION, PO BOX 18
Helensburgh,
Dunbartonshire.

Trade PC Engines from Active Sales and Marketing.
Tel: 01 384 2701
Fax: 01 371 0839

We Accept EXPRESS VOUCHERS

arcade game that has the right mix of killing and thinking to provide a stunning game. As usual you can find extra weapons to help your quest. Beautiful graphics make the game look as good as it plays.

● WATERLOO

PSS 01 377 4645
£24.99

Wargames don't have a huge following, but there are plenty of people out there to justify them. Waterloo has nice graphics and although not the simplest wargame to play, it is challenging and will keep even the most battle-hardened of generals busy for many an arduous campaign.

● NEW ZEALAND STORY

Ocean 061 832 6633
£24.99

If there's a game that justifies the word cute this year it just has to be New Zealand Story. Where else can you control a little baby Kiwi who goes around rescuing other Kiwi's from a mean old walrus? There are lots of levels to complete, and it's... cute.

● DUNGEON MASTER

Mirrorsoft 01 928 1454
£29.99

A world filled with monsters and treasures await anyone brave enough to enter the labyrinthine catacombs of Dungeon Master. 14 Levels of dungeon await and only the brave and strong will come out alive. .

● INTERCEPTOR

Electronic Arts 0753 49442
£24.95

Flight simulators are often dull and boring, but Interceptor is far from that. You're at the controls of and F-18 and have to accomplish many missions against hostile forces. The graphics are superb and the missions will challenge even an ace pilot.

● VIRUS

Microprose 0666 504326
£19.99

Virus was originally written on the Archimedes and was thought impossible on any other machine. The Amiga proved them wrong. You too can experience the wonderful graphics and varied missions as you fly around worlds, zapping and fighting for survival.

● DRAGONS LAIR

Entertainment International 0268 541126
£44.95

It might seem expensive, but that's because it comes on six disks. Dragon's Lair was one of the first arcade games to use laser disk technology and it's even more impressive when you realise that your Amiga does it with no extras – just its memory and good programming.

● POPULOUS

Electronic Arts 0753 49442
£24.95

The fate of 999 worlds lies in the balance with you controlling the forces of good. Play god and create a world for your people to live in – not forgetting to destroy the minions of evil of course, before evil destroys your people.

LANGUAGES

● ARGASM

Argonaut Software
£59.95

The fastest assembler available. It's compatible with most other assemblers so you can just transfer a file to Argasm and carry on working.

▲ Very fast assembler
▲ Compatible with Devpac

▼ Can't assemble to memory

● GFA BASIC 3

GFA Data Media 0734 794941
£64.95

Amiga BASIC has it's good points, but if you want a more friendly and powerful language to program in there's GFA BASIC. It can be used as a standard BASIC, but to get the full benefit from it you need to use the more potent structured commands. It's compatible with Amiga BASIC too – so you won't have to start all over again if you convert a program.

▲ Fast Interpreted BASIC
▲ Structured language

▼ Requires compiler to produce stand alone code

● HISOFT BASIC

Hisoft 0525 718181
£79.95

A very fast compiled BASIC with a powerful text editor to make life easier. Instruction manual helps you through the tutorial programs. Can compile Amiga BASIC programs with no modification.

▲ Produces very fast code
▲ Compiled language

▼ No interpreter – you must compile in between each modification to the program – which wastes time

● LATTICE C V5

Metacomco 0272 428781
£241.50

C is the next best thing to assembly language when it comes to speed, and Lattice C is a very good implementation of C. Includes a powerful debugger for when things don't go right. Also has a powerful text editor for creating the code and two very hefty manuals.

▲ Good text editor
▲ The best and fastest version of C

▼ Price to match

MISCELLANY

● SUMMASKETCH

HB Marketing 0895 444433
£459.95

Graphics tablets are used commonly in CAD because they allow greater control than the humble mouse. Summasketch

Evesham Micros

WE ACCEPT EXPRESS VOUCHERS

CAMBRIDGE SHOP NOW OPEN!
5 Glisson Road, Cambridge
Tel: (0223) 323898

All prices include VAT and Delivery

ATARI

All our ST prices include: mouse etc. plus 5 disks of software including 'First Word' wordprocessor, utilities, 'Neochrome' graphics utility, game and demos.

520 STFM POWER PACK

Amazing value, all-new special ST package from Atari! Includes 520STFM with 1Mb drive, joystick, mouse, user guide, 5 disks of public domain software, plus an incredible selection of chart-topping software with a total RRP of over £500! Software included is:

R-Type	Pacmania	Out Run	Nebulus
Afterburner	Starglider	Bombuzal	Stargoose
Double Dragon	Super Huey	Xenon	First Music
Super Hangon	Eliminator	Gauntlet II	First Basic
Space Harrier	Predator	Black Lamp	Organiser
Overlander	Bombjack	Starray	

All for only **£349.00** inc VAT & delivery

520 STFM SUPER PACK

Fantastic value! Includes 520 STFM with 1Mb drive, software with a total RRP of over £620, joystick, mouse, User Guide and 5 disks of Public Domain Software. Software includes:

Marble Madness	Test Drive	Chopper X
Beyond Ice Palace	Buggy Boy	Ranarama
Thundercats	Quadrallen	Starquake
Summer Olympiad	Xenon	Genesis
Arkanoid II	Wizball	Black Lamp
Eddie Edwards Ski	Seconds Out	Thrust
Ikari Warriors	Zynaps	Organiser

only **£319.00** inc VAT & delivery

520 STFM with 1Mb internal drive fitted	£269.00
1040 STFM latest model, with built-in TV modulator	£399.00
1040 STFM Super Pack: includes 21 software titles and games joystick as supplied with above '520 STFM SUPER PACK' offer	£429.00
1040 STFM Hyper Pack, including 'Hyper Paint', 'Hyper Draw', 'First BASIC', 'Organiser' plus £50 Atari Software Offer Voucher	£429.00
Mega ST1 with monochrome monitor	£599.00
Mega ST2 with monochrome monitor	£849.00
SM124 monochrome monitor ..... £119.00 bought with ST	£110.00
SC1224 colour monitor	£279.00
Philips CM8832 14" colour monitor c/w ST cable	£219.00
ITT CP3228 16.5" TV/Monitor with remote control & ST cable	£229.00

AMIGA ACCESSORIES

Amiga 500 Low Cost RAM/Clock expansion unit; ultra-neat design	£79.00
External 5.25" 40/80 track switchable floppy drive	£114.95
Midi Interface by Omega Projects, including 30" serial connector	£29.95
Contriver Hi-Res replacement mouse, with mouse mat and pocket	£22.95
Vortex 'System 2000' 40Mb hard disk, with interface & software	£529.00
ITT CP3228 16.5" TV/Monitor with full remote control and SCART cable	£229.00
Philips CM8833 stereo sound version of above, + video/audio inputs, c/w cable	£229.00
Amiga 500 dust cover	£4.95

DOUBLE TAKE! PYE 15" FST TV/MONITOR (MODEL 2325)

Superb quality, stylish medium resolution FST colour TV/monitor to suit the Amiga or Atari ST. Features teletext, full infra-red remote, SCART connector, Video/Audio inputs and headphone output, 40 tuner presets, ext. aerial connector and a loop aerial. Supplied with cable (please state computer type when ordering).

ALL THIS FOR JUST £269.00 Includes VAT and computer connection lead

Amiga & ST 3.5" Drives

- ★Very Quiet
- ★Slimline Styling
- ★Fully Compatible
- ★Top quality Teac/Citizen drive mechanism
- ★On/Off switch for Amiga
- ★External plug-in PSU for ST
- ★Throughport for Amiga
- ★1Mb unformatted capacity

Fully compatible, high quality 3.5" external drives for the ST and Amiga

Amiga version only £74.95

Atari ST version only £79.95

Prices include VAT & delivery

Western Digital Filecards

Upgrading your PC to hard disk? Look no further, we offer the best prices on top quality hardcards. Thorough documentation supplied, low power consumption, with free XTree file management software and Speedread. For Amstrad PC users we supply hardcards tested and formatted, with our simple software installation procedure. The best packages available!

21MB...£225.00 32MB...£239.00 40MB...£289.00

3.5" disks

10...£ 9.95 · in plastic case £11.95
25...£22.95 · in 40 cap case £29.95
Fully guaranteed double sided media

5.25" disks

25...£9.95 in 50 cap box £18.95
in 100 cap box £20.95
Fully guaranteed double sided media

Amstrad PC1512/1640/2086

We offer a wide choice of Amstrad PCs with many upgrade options. For the hard disk option, check our 'Evesham Upgraded Models'. Only the best will do - so we normally upgrade by means of a Western Digital Filecard, which includes XTree & SpeedRead software; however on single drive 1512/1640 models we can offer internal installations at the same price (leaving more expansion room but no upgrade opportunity for a 2nd floppy drive). Prices in lighter type exclude VAT.

Free with 1512 models... Ability and 4 US Gold Games

	SD	SD	AMS H.D.	SD 21MEG	DD 21MEG	SD 32MEG	DD 32MEG
				EVESHAM UPGRADED MODELS			
MONO 1512	384.35 **442.00**	477.39 **549.00**	N/A N/A	580.00 **667.00**	673.04 **774.00**	592.17 **681.00**	685.22 **788.00**
COLOUR 1512	494.78 **569.00**	555.65 **639.00**	N/A N/A	690.43 **794.00**	751.30 **864.00**	702.61 **808.00**	763.48 **878.00**
MONO 1640	474.78 **546.00**	555.65 **639.00**	738.26 **849.00**	670.43 **771.00**	751.30 **864.00**	682.61 **785.00**	763.48 **878.00**
CGA (COLOUR) 1640	581.74 **669.00**	651.30 **749.00**	825.22 **949.00**	777.39 **894.00**	846.96 **974.00**	789.57 **908.00**	859.13 **988.00**
EGA (ECD) 1640	677.39 **779.00**	738.26 **849.00**	938.26 **1079.00**	873.04 **1004.00**	933.91 **1074.00**	885.22 **1018.00**	946.09 **1088.00**
2086 MONO	564.35 **649.00**	633.91 **729.00**	813.04 **935.00**	760.00 **874.00**	829.57 **954.00**	772.17 **888.00**	841.74 **968.00**
2086 CD	656.52 **755.00**	726.09 **835.00**	903.48 **1039.00**	852.17 **980.00**	921.74 **1060.00**	864.35 **994.00**	933.91 **1074.00**
2086 12" HRCD	746.96 **859.00**	813.04 **935.00**	995.65 **1145.00**	942.61 **1084.00**	1008.70 **1160.00**	954.78 **1098.00**	1020.87 **1174.00**
2086 14" HRCD	833.91 **959.00**	903.48 **1039.00**	1086.09 **1249.00**	1029.57 **1184.00**	1099.13 **1264.00**	1033.04 **1198.00**	1111.30 **1278.00**

12 MONTHS ON-SITE MAINTENANCE NOW SUPPLIED WITH ALL MODELS OF PC1512, 1640 AND 2086 FREE OF CHARGE!

upgrades / accessories

1512 memory upgrade to 640K	£39.95	Enhancer 101 replacement keyboard	£74.95
Maths Co-processor 8087-2	£129.00	3.5" drive (720K) for SD models	£79.95
NEC V30 (8086 replacement)	£24.95	PC2000 series compatible 5.25" (360K) external drive	£84.95
Cipher CT1525 tape streamer	£319.00	Genius GM6000 Mouse package	£34.95
Amstrad Modem Card V21/23	£99.00	Konix PC Joystick & Controller Card	£28.95
Communicate Fax Card SR	£199.00		

Amstrad PPCs

Low prices on all portable PCs - especially twin drive models
prices in brackets are excluding VAT

PPC512S	(£373.04) £429.00	PPC640S	(£477.39) £549.00
PPC512D	(£433.91) £499.00	PPC640D	(£546.96) £629.00

Low price External 3.5" floppy drive (720K), suits any Amstrad PC 1512/1640 inc. DD and HD models, uses no expansion slots £99.95

Central Point Software

For all your PC disk management requirements

PC Tools Deluxe Ver.5.5... Other utililities may claim to 'do it all' but only PC Tools Deluxe is the complete disk utility package, providing a fast hard disk backup, the best undelete available, 100% safe formatting of floppy and hard disks, unformat, reliable disk caching, compress facility. In fact everything required to manage & protect your data at a sensible price..... **£59.95**

PRINTERS

All prices include VAT, delivery and cable

star

We use and recommend Star printers since they do offer an unbeatable combination of features, print quality, reliability and value. Get it right with a Star at our special, all in, prices. We can provide on-site maintenance contracts for only £5.75 extra.

Star LC24-10 feature-packed multifont 24 pin printer, amazing low price	**£239.00**
Star LC10 best-selling 144/36cps printer, 4 NLQ fonts, inc.2 extra ribbons free	£169.00
Star LC10 7-colour version of above printer, inc.2 extra black ribbons	£215.00
Star LC15 wide carriage version of LC10	£329.00
Star LC24-15 wide carriage version of LC24-10	£409.00
Star FR-10 new Professional 9pin 300/76 cps, 31K buffer, 16 NLQ fonts, EE-PROM configuration memory and 12 months on-site maintenance	£399.00
Star FR-15 9pin as FR10, wide carriage version	£499.00
Star XB24-10 Professional 24pin: 27K buffer, 4 SLQ & 25 LQ fonts with EE-PROM configuration memory and 12 months on-site maintenance	£499.00
Star XB24-15 wide carriage version of XB24-10, with 41K buffer	£649.00
NEC P2200 budget 24pin, great value 168/56 cps	£279.00
Olivetti DM100S Super 9pin 200/30 cps, inc.12 months on-site maintenance!	£129.95
Hewlett-Packard 'Deskjet' inkjet printer 240/120 cps	£749.00
Amstrad DMP3160/3250DI good value 10" 9pin	£169.00
Panasonic KXP1081 reliable budget 10" printer 120/24 cps	£169.00
Panasonic KXP1180 super new 9pin with over 3400 typestyles, 11" carriage	£199.00
Panasonic KXP1124 good quality 11" multifont 24pin printer	£299.00
Epson LX800 popular 10" 180/25 cps	£179.00
Epson LQ550 (was LQ500) good 24pin printer 150/50 cps	£319.00
Citizen 120D good value 10" 120 cps	£139.00
Mannesmann Tally MT-81 130/24 cps	£149.00

HOW TO ORDER

All prices VAT/delivery inclusive
Express courier delivery £5.00 extra
Send cheque, P.O. or ACCESS/VISA details
Phone with ACCESS/VISA details
Govt., educ. & PLC official orders welcome
All goods subject to availability E.&O.E.
Open to callers 6 days, 9.30-5.30
Fax: 0386 765354

Evesham Micros Ltd
63 Bridge Street
Evesham
Worcs WR11 4SF
Tel: 0386 765500

Also at: 1762 Pershore Rd., Cotteridge, Birmingham, B30 3BH Tel: 021 458 4564

is a tablet for your Amiga which enables you to draw and scribble to your hearts content. Transferring technical diagrams is a doddle thanks to a widget with a crosshair and a pen.

▲ Crosshair and pen included
▲ Good alternative to mouse

▼ Damn expensive

● AMDRIVE

ASAP 0724 280222
£399

A 40 Mb hard drive for either the A500 or A2000 Amiga. Comes ready formatted. Can either autoboot from hard drive or boot from disk. Fast access to data on the hard disk.

▲ Fast storage system
▲ Cheap

▼ Needs Kickstart 1.3

● MINIGEN

Applied Systems Developments Ltd 0724 280222
£113.85

A genlock device which allows you to produce Chart Show-style overlays on your videos. Uses standard IFF files to overlay. Easy to use.

▲ Lots of software available to exploit Minigen
▲ Cheap

▼ Poor manual and introduction disk

● VIDI AMIGA

Rombo Productions 0506 414631
£99.95

Grab images at a rate of up to four frames per second. Colour images are grabbed as three mono images through filters and therefore can't be grabbed in real time. Basic unit grabs 320 by 200 images in 16 colours, but for a bit more cash you can snap 320 by 256 images in 4096 colours.

▲ Very fast mono image grabber
▲ Can play back a sequence of frames from memory

▼ Software incomplete

● VIDEO STUDIO

Maze technology 01 520 9753
£99

A complete post-production utilities package. Can be used as a video titler. IFF file import. Plenty of wipe/dissolve patterns to make things more impressive.

▲ Comprehensive

▼ Requires two disk drives and 1Mb RAM
▼ For best results will need a genlock

● DAY BY DAY

Digita International 0395 270273

If you have trouble remembering appointments then this could be the thing for you. It enables you to store and recall information on appointments at the touch of a key. Ideal if you use your computer every day.

▲ Month and week planner to remind you of things to be done

▲ Awkward to edit – you have to virtually retype the entry

● A-MAX

Entertainment International 0268 541126
£134

Why bother with a Macintosh emulator when you've got an Amiga? Because Mac DTP software knocks spots off anything on the Amiga. Admittedly you need at least 1Mb of RAM to do anything useful with A-Max, but a 1Mb Amiga is considerably cheaper than a Mac.

▲ Works with most Mac software

▼ Doesn't support hard disk... yet
▼ Need to purchase Mac ROMs too

● PERSONAL TAX PLANNER

Digita International 0395 270273
£39.95

A menu driven program to calculate your income tax liability and prepare your tax return. Ideal if you have to fill in your own tax returns.

▲ Menu driven
▲ Easy to use

▼ Tax is boring

NEXT WEEK

THE SHOPPING EXPRESS BUYER'S GUIDE TO WHICH PC

DISKS

3" CF2	Per 5	£10.22
	Per 10	£19.52
3.5" DS/135tpi	Per 10	£11.26
	Per 25	£19.52
5.25" DS/96tpi	Per 10	£5.61
	Per 25	£12.56

DISK STORAGE - TOUGH LOCKABLE

Box for 3"	Holds 30	£8.48
Box for 3.5"	Holds 30	£8.48
Box for 5.25"	Holds 100	£9.96

RIBBON REFRESH

The unique fabric ribbon restorer 160ml can £7.78 + VAT

Dunning COMPUTER SERVICES

Dept NCE, 32 Granville Road, Bournemouth, Dorset. BH5 2AH

Access VISA

(0202) 431762

All prices include Carriage just add V.A.T. @ 15%. Enquiries welcome on our Help Line. Cheques/P.O.'s with order please. Or phone Credit Card Hotline

RIBBONS FOR ALL MAKES OF PRINTERS
If yours is not listed - give us a call

		1 off £	2 off £	5 off £
Amstrad DMP 2000	F	3.44	6.48	14.74
Amstrad DMP 4000	F	5.17	9.52	19.96
Amstrad 3000	F	3.44	6.48	14.74
Amstrad 8256/8512 Std. Life	F	3.44	6.48	14.74
Amstrad 8256/8512 LongLife	F	4.30	7.78	17.35
Amstrad 8256/8512 F Colours: Red, Blue, Green, Brown	F	4.30	7.78	17.35
Amstrad 8256/8512	MS	3.44	6.48	14.74
Amstrad 9512 Std. Life	F	3.44	6.48	14.74
Amstrad 9512 Longlife	F	4.30	7.78	17.35
Amstrad 9512 Fbr Colours: Red, Blue, Green, Brown	F	4.30	7.78	17.35
Amstrad 9512	MS	3.44	6.48	14.74
Brother AX10, AX15	F	3.65	6.93	16.42
Brother HR15/25/35	F	3.57	6.78	16.06
Brother HR15/25/35	MS	4.03	7.66	18.13
Citizen 120D	F	3.44	6.48	14.74
Citizen Premier 35	MS	2.43	4.62	10.94
Citizen Premier 35	F	2.99	5.69	13.45
Citizen MSP10	F	4.14	7.87	18.63
Commodore MPS801	F	3.34	6.35	15.03
Diablo Hytype II	F	2.99	5.69	13.45
Diablo Hytype II	MS	2.43	4.62	10.94
Epson FX1000, 105	F	4.30	7.78	17.35
Epson MX/RX/FX100	F	4.30	7.78	17.35
Epson MX/RX, FX800, FX85 FX80	F	3.44	6.48	14.74
Epson LX80/LX86	F	2.47	4.70	11.11
Epson LQ1500	F	4.22	8.03	18.99
Epson LQ800	F	4.14	7.87	18.63
Epson LQ1000	F	4.38	8.32	19.71
Epson EX800/1000	F	5.17	9.52	19.96
Epson LQ2500	F	4.73	8.99	21.28
Hewlett Packard Deskjet Cartridge		12.80	24.30	59.96
Qume 1v Sprint 7/9	F	4.30	7.78	17.35
Qume 1v Sprint 7/9	MS	3.44	6.48	14.74
Seikosha FP800 Longlife	F	4.30	7.78	17.35
Star Radix 15	F	5.47	10.40	24.61
Star SD15	F	5.68	10.79	25.56
Star NX15	F	5.71	10.85	25.69
Star LC10	F	4.30	7.78	17.35
Star LC2410	F	3.50	6.65	15.75
Star NB15	F	6.37	12.10	28.66
Star NL10	F	5.11	9.70	22.99
Star SD10	F	4.81	9.15	21.64
Star NC10	F	4.30	7.78	17.35

MS = Multistrike. F = Fabric

PRINTER STANDS

UNIVERSAL TO FIT ANY PRINTER	£7.78
WIRE STAND TO FIT ALL 80 COL	£9.60

MONITOR SCREEN FILTERS

12" Mono	£11.85
14" Mono	£12.95
12" Colour	£14.35
14" Colour	£15.65

CONTINUOUS STATIONERY

		Forms/Box	Price/Box £
11 x 9.5			
1 Part 60GSM (M)	*	2000	13.88
1 Part 70GSM (M)	P	2000	15.68
1 Part 80GSM (M)	P	2000	17.40
1 Part 85GSM (M)	P	1000	11.76
2 Part NCR	P	1000	18.60
3 Part NCR	P	700	21.79
4 Part NCR	P	500	21.60
2 Part NCR TINT		1000	22.84
11.66 x 9.25 (A4)			
1 Part 60GSM (M)	P	2000	17.32
1 Part 70GSM (M)	P	2000	17.92
1 Part 80GSM (M)	P	2000	20.48
1 Part 85GSM (M)	P	1000	12.76
2 Part NCR 80/57	P	1000	29.20
11 x 14.5			
1 Part 60GSM	*	2000	17.76
1 Part 70GSM	*	2000	19.56
2 Part OTC	*	1000	20.03
2 Part NCR	*	1000	23.60

* = Plain or Music Ruled P = Plain only (M) = Micro perfs all edges
TINT = Coloured Paper 2 Part - White/Pink 3 Part - White/Yellow/Pink 4 Part - White/Yellow/Green/Pink

DRIVE CLEANERS

For 3" Head	£3.43
For 3 1/2" Head	£2.90
For 5 1/4" Head	£2.56

MOUSE PADS

Quality A4 Size Soft Pad	£4.30

COMPUTER LABELS

Top Quality Avery Brand
FREE Tape Dispenser/Cutter worth £4.99 + VAT with every 10000 labels!

	2000 £	5000 £	10000 £
1 ACROSS			
2 3/4 x 15/16	6.96	14.48	25.52
2 3/4 x 1 7/16	8.48	18.04	32.13
3 1/2 x 15/16	7.39	15.52	27.43
3 1/2 x 1 7/16	9.52	21.70	36.83
3 1/2 x 1 15/16	12.96	28.57	51.78
4 x 15/16	7.78	16.61	29.52
4 x 1 7/16	9.96	21.43	38.52
4 x 1 15/16	13.09	28.83	52.13
2 ACROSS			
2 3/4 x 15/16	6.39	13.17	23.04
2 3.4 x 1 7/16	7.61	15.96	28.30
3 1/2 x 15/16	7.13	14.87	26.17
3 1/2 x 1 7/16	9.52	21.70	36.83
3 1/2 x 1 15/16	12.96	28.57	51.78
4 x 15/16	8.04	17.00	30.22
4 x 1 7/16	9.96	21.43	38.52
4 x 1 15/16	12.78	28.09	51.26
3 ACROSS			
2 3/4 x 15/16	6.23	12.85	22.32
2 3/4 x 1 7/16	7.51	15.76	27.80
3 1/2 x 15/16	6.36	15.90	28.10
3 1/2 x 1 7/16	8.48	18.04	32.13
3 1/2 x 1 15/16	11.46	24.63	44.52
4 x 15/16	7.13	14.87	26.17
4 x 1 7/16	9.66	20.83	37.52
4 x 1 15/16	12.68	27.89	50.76

YOUR ONE STOP SHOP

MORE SOFTWARE THAN YOU CAN HANDLE!
MORE HARDWARE THAN YOU CAN USE!

Software SUPERSTORE

20 MEG A590 Hard Drive

with space for 2mb extra RAM to turn your AMIGA into a 3 Meg machine. Essential for advanced graphics etc.

£399.99 *OR £15 MONTHLY

A590
Complete with 2mb extra Ram fitted
ONLY **£699.99** *OR £27 MONTHLY

Extra RAM per 1/2Mb
£79.99

A500 0.5 mb UPGRADE
ONLY **£79.99**
WITH CLOCK **£89.99**

AMIGA 3.5" 2nd DRIVE ONLY £79.99

* DISABLE SWITCH
* THROUGH PORT
* SLIM SIZE
* LOW POWER CONSUMPTION
* HIGHLY RELIABLE
* EXCELLENT R/W PERFORMANCE

ST 2nd DRIVES
ALSO AVAILABLE
PLEASE ASK FOR DETAILS

WE STOCK MOST DATEL PRODUCTS

AMIGA A500 BATMAN PACK

ALMOST **HALF PRICE**

	R.R.P.
A500	£399.99
TV MODULATOR	24.99
BATMAN (THE MOVIE)	24.99
NEWZEALAND STORY	24.99
DELUXE PAINT II	49.99
INTERCEPTOR	29.99
TEN STAR PACK	229.50
TOTAL R.R.P.	£784.44
LESS DISCOUNT	£384.45
OUR PRICE	**£399.99**

*OR £15 MONTHLY

1 MEG AMIGA PACK:-
as above plus half meg upgrade, mouse, mat, mouse holder, dust cover and 10 disks
OUR PRICE
ONLY £499.99
*OR £19 MONTHLY

WE STOCK SEGA, ATARI, C16, MSX, BBC/ ELECTRON, etc.

VISA

Access

Licensed Credit Broker

*(subject to status) Written details on request.

OCEANIC DISK DRIVE

DISK DRIVE C64 COMPATIBLE
Smart, slim, reliable.
FREE SOFTWARE
Activision Music Studio, Word Processor, Database Communications Program.
ONLY £129.99

1 YEAR ON-SITE MAINTENANCE ONLY £10 EXTRA ON ANY PRINTER

MAIL ORDER:- Carriage at Cost
ORDER HOTLINE
(MON to FRI)
(0782) 202269
ADVICE HOTLINE (0782) 268620
for FAST & FRIENDLY SERVICE

PRINTERS

STAR LC10
Acclaimed "Best Buy" budget printer. Now massively under-priced at just
£169.99 *OR £8 MONTHLY

STAR LC10 Colour
The perfect printer for every Amiga. Colour output from all the better art packages - or just slot in a black ribbon for word processing. Cheap to run too. Very affordable
£229.99 *OR £9 MONTHLY

STAR LC24 - 10
24 Pin quality at a price you can afford. 8 Fonts, 3 print variations, paper parking, 170 CPS draft, 57 CPS LQ
£259.99 *OR £10 MONTHLY

FREE Cable with every Printer

STOKE-ON-TRENT
11 Market Square Arcade, Hanley Stoke-on-Trent
Manager: Wayne Tel: 0782 268620 Open 6 Days

SHEFFIELD
6 Waingate, Sheffield
Manager: Tony
Tel: 0742 721906
Open 6 days

ST HELENS
27 Baldwin Street, St Helens
Manager: Adrian
Tel: 0744 27941
Closed Thursday

STOCKPORT
6 Mealhouse Brow, (Off Little Underbank), Stockport. Manager: Ray
Tel 061 480 2693
Closed Thursday

SHOPPING EXPRESS READER ADS

There are great bargains to be had in our reader ads section, but remember to check before you buy -Express cannot be held responsible for the quality of the goods on offer!

● HUMOUR

WANTED kick start for Amiga a nut and bolt would help. I had to unplug all my disk drives to do a for-next loop in Amiga Basic.

TAKE AMSTRAD CPC, five tonnes of Nitro-Glycerine based compound, several gallons of petroleum, mix and bake for one hour on high. From Paul Weir and the Phantom File Fiddlers.

MESSAGE to Ray Fowles: The Sinclair QL is the nearest thing I've seen to a hardware virus. It's only good at making a botch of things.

AMIGA owner rips off British Rail - buys a return ticket and doesn't come back. - Hi Elaine! Screen 100 of Bubble Bobble Beckons us! Zippy.

"MINI Mogul": My self-loading wonder is as good as your "Bolt-Action N-Cube!" NCube Nihilist: "Ice Cube rather, down the drain after liquidation!" R.G. Burdett, Weymouth.

WHAT do you call an Amiga with a half meg drive, no graphics and no sound? An Atari ST. Hi to Baz, Mala and Birdy.

● USER GROUPS

LIVE IN SOUTH WALES? Interested in forming an Amiga Users Club? Then Phone Public House BBS on 0222 221168. For online info and files. weekdays, eve's and 24 hours w/end.

COMPUTER TEACHER wants to help students making machine specific enquiries contact user groups please send your group details and address to Flute, 14 Grove Avenue, Little Waldingfield, Sudbury, Suffolk, CO10 0SX.

C64 disk contacts wanted. So please contact Les at 30 Gilmonby Road, Park End, Middlesborough, Cleveland, TS3 0AD. Or Tel: 0642 226256.

C64 tape user contacts wanted. So please contact Alan at 16 Marrick Road, Park End, Middlesborough, Cleveland, TS3 7RX.

SINCLAIR QL contacts wanted to exchange ideas, hints, tips etc. Write to Brad Grace, 76 The Willows, Clumber Street, Newcastle-upon-Tyne, NE4 7EY.

AMIGA contacts wanted: Write to Danny, 5 Beckside North, Beverley, North Humberside HU17 0PR. Send disk or letter, 100% reply posted next day. Also Amiga cheats disk for sale £2 each.

COMPUTER Student Contacts Wanted. Write to A. M. Drewett, 37 Longdon Ave, Aylesbury, Bucks HP21 9UW.

AMIGA owners in Nottinghamshire! Please mail details to help create a local user network. S.A.E appreciated. Replies guaranteed. Be patient! Mansfield A500, 4 Poplar Street, Mansfield Woodhouse, Mansfield, Notts NG19 9LB.

INTERESTED in joining a Kick Off League in London? With trophies for winners? Contact Ray at 30 Windsor Crescent, Wembley Park, Middlesex, HA9 9AW or ring 01 904 0555 between 6pm-11pm.

64 (Tape) not disk - users club about to start up - going global soon. Trade, Demos, comps: For details S.A.E. to: D. Mason, Ethorpe Hotel, Gerrards Cross, Bucks, SL9 8HY.

IS there a Clipper/DBase 3+ User Group in London? I will be grateful for any details. Guy Ellis, 23 Sussex St., Pimlico, London, SW1V 4RR.

ISLE OF WIGHT PC User Group. Anybody wishing to join should contact I.O.W. 0983 614277/614649 and ask for Sean.

BOURNEMOUTH and POOLE Atari User Group. Support for 8 Bit and ST. Monthly meetings. Membership £8.00. Quarterly Newsletter 8i16, £3.80 four issues. Details write to: 248 Wimborne Road, Oakdale, Poole, Dorset.

PCW Users Interested in P.D. send S.A.E. to: PCW-File, 18 Sunbrow,Haslemere, Surrey GU27 2QP. The PCW-File is on Boog BBS 0252 626233, 24hrs, V21/V23. No Fees.

IF You want to spread your groups in Asia. Send your latest + your demos to: Tariq, P.O. Box 3581 Safat, 13036, Kuwait. 100% reply, Amiga Only. Also will swap spot.

AMIGA Contacts wanted. Write to Simon, 30 Diamond St., Saltburn, Cleveland, TS12 1EB or Call (0287) 24167.

SPECTRUM Owners Join Indug, the World's largest Spectrum Users Group. Monthly Magazine, Discounts, Support + much more. Send A5 S.A.E. for full details to INDUG, 34 Bourton Road, Gloucester, GL4 0LE.

LAMER? Want to swap software, tips, demos and form a Lamers against Lamers Society? Then contact, Faisal Patel, 73 Track Road, Batley, W. Yorks, WF17 7AB.

THE Computer Information Club. A Club for PCW, PC, CPC, Spec+ and Atari, producing a Newsletter with hints, tips and discover software. Contact The Editor, 345 Western Way, Letchworth, Herts.

AMIGA Contacts wanted to start FREE beginners club in the south to swap games, cheats, tips etc. Please contact David after school on 0425 279835.

GWYNEDD, N. WALES. ST User Group. I want to get in touch with all local ST Users to form a new group. Contact S. Rammerling, Clogwyn. Plas Gwyn, Pwllheli, Gwynedd, N. Wales, LLS 36UA.

● ANNOUNCEMENTS

THE spurious gogs is reading these pages every week. Why not get in touch with him and get info on the VHS and Amiga stuff he has!! (Yo! Nomad) Sgt. Pepper. 114a Norton Drive, Bellshill, Glasgow.

● HELP WANTED

PROGRAMMER Wanted to develop with Atari ST Medieval game. Send demo or phone (0244) 821484, Justin, 14 Hawthorne Ave, Connahs Quay, Deeside, Clwyd, CHS 4TF, Serious programmers only, no fakes!

HELP wanted: does anyone know how to crack a Nimbus Net Work? Well write to: Chris 73 Hillbrook Rd, London SW17 85F.

CAN anyone help with the Atari ST Bards Tale? In return I can help with other tips. Write to "Revendale" Hatshill Farm Close, Bickleigh PL6 7AH. (075 539600).

ANY info on TRS-80 level II computer and expansion interface 1140 for programming

PUBLIC APOLOGY

M.D. Office Supplies would like to take this opportunity to apologise to all its competitors. We shall with immediate effect suppiy direct to the public, Computer Discs, Storage Boxes, etc. AT BELOW WHOLESALE PRICES

5.25" DISCS & BOXES 5.25"

25 5.25"DS.DD 96 TPI with 50 Capacity Lockable Storage Box.....£11.50
50 5.25"DS.DD 96 TPI with 100 Capacity Lockable Storage Box £16.50
75 5.25"DS.DD 96 TPI with 100 Capacity Lockable Storage Box £22.50
100 5.25"DS.DD 96 TPI with 100 Capacity Lockable Storage Box £28.50
200 5.25" DS. DD 96 TPI with 2 x 100 Capacity Lockable Storage Boxes.....£52.99

OUR 5.25" DISCS ARE VERY CAREFULLY SELECTED TO GIVE YOU 100% ERROR FREE PERFORMANCE. EACH DISC IS OFFERED WITH OUR 100% MONEY BACK GUARANTEE AND IS SUPPLIED WITH LABELS

3.5" DISCS & BOXES 3.5"

25 3.5" DS.DD 135 TPI with 50 Capacity Lockable Storage Box.....£20.95
35 3.5" DS.DD 135 TPI with 100 Capacity Lockable Storage Box.....£30.95
45 3.5" DS.DD 135 TPI with 100 Capacity Lockable Storage Box.....£34.95
55 3.5" DS.DD 135 TPI with 100 Capacity Lockable Storage Box.....£40.95
65 3.5" DS.DD 135 TPI with 100 Capacity Lockable Storage Box.....£44.95
75 3.5" DS.DD 135 TPI with 100 Capacity Lockable Storage Box.....£49.95
150 3.5" DS DD 135 TPI with 2, 100 Capacity Lockable Boxes £89.95

OUR 3.5" DISCS ARE VERY CAREFULLY SELECTED TO GIVE YOU 100% ERROR FREE PERFORMANCE. EACH DISC IS OFFERED WITH OUR MONEY

HIGH DENSITY 5.25" DISCS

25 5.25" DSHD plus 50 BOX.....£19.99
50 5.25" DSHD plus 100 BOX.....£37.99
75 5.25" DSHD plus 100 BOX.....£53.99
100 5.25" DSHD plus 100 BOX.....£69.99
200 5.25" DSHD plus 2 x 100 BOXES.....£119.99

HIGH DENSITY 3.5" DISCS

10 DSHD 3.5" DISCS plus 50 BOX.....£18.99
30 DSHD 3.5" DISCS plus 50 BOX.....£52.99
50 DSHD 3.5" DISCS plus 100 BOX.....£81.99
100 DSHD 3.5: DISCS plus 100 BOX.....£139.99
200 DSHD 3.5" DISCS plus 2 x 100 BOXES.....£249.99

BULK BUYERS

100 DSDD 3.5" TPI.....£59.99
150 DSDD 3.5" TPI.....£87.99
200 DSDD 3.5" TPI.....£110.00
500 DSDD 3.5" TPI.....£230.00

M.D. OFFICE SUPPLIES WILL NOT BE BEATEN ON QUALITY OR PRICE. FOR LARGER QUANTITIES PLEASE RING US NOW.

PRICE & QUALITY GUARANTEE

All our Discs are top quality products and are Certified 100% error free. Should you ever see a comparable product advertised in this magazine at a lower price we will not match it we will

BEAT IT GUARANTEED

M.D. OFFICE SUPPLIES
18 CRESCENT WAY, FARNBOROUGH, KENT. BR6 9LS
TELESALES HOTLINES: 0689-61400

We Accept EXPRESS VOUCHERS
VISA
All prices include VAT and Delivery UK only
Education, Trade, enquiries welcome
Supplied subject to availability. E/OE

Ladbroke Computing International

"The Country's Leading 16 Bit Specialist"

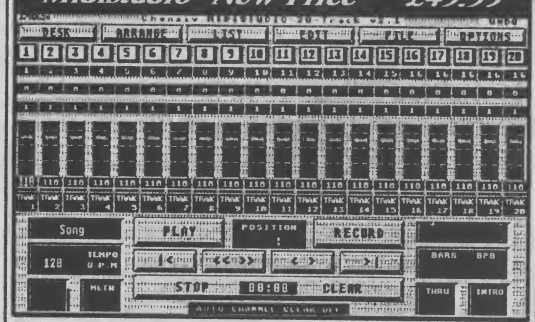
AMIGA

33 Ormskirk Road, Preston, PR1 2QP.
Open Mon. - Sat. 9:30 am to 5:00 pm
Dealer enquiries welcome.

You Can't Afford to Shop Elsewhere All Prices Inc. VAT

This company has given years of full support to computer users from their premises at 33 Ormskirk Road Preston. Now from their Mail Order premises they can offer this" second to none "service to users countrywide. All Software/Hardware is ex-stock and fully tested prior to purchase to ensure that returned goods are now a thing of the past. All hardware is supported by our on site engineers so that quick turn around on all repairs is guaranteed. There are no hidden extras WYSIWYG. ALL PRICES INCLUDE VAT AND DELIVERY on orders over £100 (Mainland UK)next day delivery +£5). All prices are correct at time of going to press and are subject to change without prior notice.Phone for latest prices, information advice(we are always happy to help.)

Midistudio New Price £49.99



Midistudio is an attractively priced 20 track Midi Sequencing package. It can record up to 682 bars per phrase(pattern) on up to 100 phrases. Any phrase can be placed on any track. Tracks can be soloed and muted and tracks and phrases can be named. Program numbers can be displayed in a variety of ways including 0-127, 1-128, in banks from a11-b88 or a01-b64. The desk features sliders to set relative volumes on each track and you can even do a mix on the fly. Midistudio also has a clock to display the length of the last playback. Midistudio has step time note edit functions including copy, split, merge, append, and transpose, velocity editing(including a humanize function), full controller editing, quantizing and a buffer which will store a copy of a phrase for recall after destructive editing. **Demo disk £3.99**

Midistudio Master, 30 + new features £149.99

Software

At Least 20% discount off all 16 bit games software.

E.G.	RRP	Our Price
Minimum Discount		
	£19.99	£15.99
	£24.99	£19.99
Maximum Discount		
	£19.99	£6.99
	£24.99	£9.99

Phone for best prices

Free delivery (Mainland UK only) on orders over £40, for orders under £40 add £2.50. Send SAE for catalogue

A4 Flat bed Scanner £499.99

These A4 Flat bed scanners scan at 200dpi. The mechanism includes a thermal printer which can be used in conjunction with the scanner to photo copy documents or as a stand alone printer. The scanner comes complete with scanning and graphics editing software for the ST or Amiga. Ideal for DTP.

Limited offer ex-demo £349.99

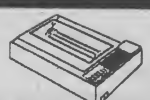
New Low Price Quality Scanning

Demonstration disk (low res) £3.99 (£2.00 redeemable)

The Image Scanner can provide high quality graphics digitising for a tenth of the cost of other digitisers. This simple unit plugs into the cartridge port of the ST and accepts scanned information via optical cables which fix easily to the head of any printer. Scanned images can be saved in raw data, Degas ,Neo and IMG formats. Best results are achieved with photo copies. The Software supports scanning resolutions of 75,150,216,300,360 and 1000 dots per inch horizontally. An example disk is available which contains a slide show of low resolution images scanned with this product. The cost of this disk is £3.99, £2.00 of which is redeemable on purchase of a scanner.

Scan at up to 1000 DPI for Only £59.99

New Low Price Printers



Star LC 10	£ 169.99	*
Star LC 10 Colour	£ 219.99	*
Star LC 24/10	£ 259.99	*
Epson LQ500	£ 319.99	*
Citizen 120D	£ 139.99	*
SLM 804 Laser	£1099.99	includes 90 days on site warranty

*** All these printers carry a 12 months on site warranty and come complete with cable. On site warranty UK Mainland only.**

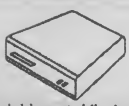
Professional Printers

Star Laser printer 8, 1 Megabyte RAM as standard upgradeable to 2 Mb, 8 resident fonts, HP, IBM, Diablo, Epson emulation, 8 pages per minute, 300 dpi. £1599.99

Star FR-10 9 pin			£ 399.99
Star FR-15 15" 9 pin			£ 514.99
Star XB-24/10 24 pin	£514.99	colour	£ 554.99
Star XB-24/15 15" 24 pin	£699.99	colour	£ 739.99

These Star printers have 12 mnths on site warranty(UK Mainland)

Hard drives



Vortex 40MB(ST & Amiga)	£499.99
Megafile 30 (ST)	£474.99
Megafile 60 (ST)	£599.99
Supra 30MB (ST)	£474.99
Third Coast 65 MB (ST)	£599.99
(Amiga)	£659.99

We are offering a range of high quality ST hard drives at ridiculously low prices. All have the following specification. Full metal case-same size/colour as Mega ST, 60 watt PSU, room for second mechanism. The low power controller is full SCSI and allows up to 8 drives on one controller. The software includes Autopark, Autoboot from any partition, partition size up to 1 Gigabyte, any number of partitions, 100% AHDI 3.2 compatible driver, write protect any partition.

40HD 42 Mb formatted, 11Ms average access time, 64K on board cache memory. . . . . **.£549.99**
50HD 48 Mb formatted, 30Ms. . . . . **.£499.99**
85HD 83 Mb formatted, 28Ms. . . . . **.£699.99**
180HD 180 Mb formatted, 20Ms. . . . **.£1299.99**

Disk drives

Cumana slim 1Mg Drive(ST).....£89.99
Cumana internal 1Mg Drive(ST) (kit or fitted) £74.99
Please note ST's case needs cutting for above internal drives.
Cumana 1Mg slim Drive, dis. switch,through port(Amiga).....£74.99
A/B boot switch (fitted)(ST).....£24.99

Monitors & Peripherals

SM 124 Mono	£109.99	Amiga Modulator	£24.99
SC 1224 Colour	£269.99	PRO 5000 joystick	£8.99
Phillips 8833 Colour	£249.99	Dcom autofire joystick	£9.99
Phillips 15" FST Remote,		Hawk scanner	£1250
Scart input, Tv with 40		Traker ball(ST-Amiga)	£24.99
tuner presets.	£234.99	80 / 100 disk box	£9.99
Other Tv's	phone	Dustcovers from	£2.99

All monitors come with scart to ST/Amiga.

Repair Centre & Upgrades

Our Atari trained engineers can repair all hardware, inc Amigas, in minimum time at competetive prices.

UPGRADES EX-STOCK

1 Mg STM (fitted) (ST)	£ 94.99 *	Board + 1 Mg upgrade (fitted) (ST)	£129.99
1 Mg STFM (kit) (ST)	£ 69.99 *	Board + 2.5 Mg upgrade (fitted) (ST)	£299.99
STFM upgrade fitting service	£ 25	Board + 4 Mg upgrade (fitted) (ST)	£499.99
STFM Blitter chip upgrade (kit) (ST)	£ 39.99 *	STFM Blitter chip upgrade (fitted) (ST)	£ 49.99 *
512 K RAM Extension board(Amiga)	£ 19.99	RAM Extension populated (Amiga)	£ 89.99
RAM Extension board+clock(Amiga)	£ 29.99	RAM Extension+clock populated (Amiga)	£ 99.99

*** Please check machine configuration before ordering.** Fitting prices quoted for machines not previously tampered with. Due to the complexity of the installation we must install and upgrade the ST board for you. All upgrades and repairs carry our 3 months parts and labour guarantee.

New Low Price Quality Disks

All our disks are top quality Sony, Maxcell or Kao products, not cheap imports. All disks carry an unconditional lifetime guarantee. Please add 60p postage and packing for each pack of ten disks.

Quantity	3.5" D/S	Boxed	5.25"D/S	Boxed
10	£8.99	£9.99	£4.50	£5.50
100	£79.99	£82.99	£40	£45
Sony Branded				
10		£10.99		
100		£99		

Phone for different capacity disk boxes and disk care kits.

** New Low Prices ** Computer Systems and Packs ** New Low Prices **

520 STFM Explorer Pack £279.99

Includes Atari 520 STFM with 1/2 Mg Memory, 1 Mg drive and mouse. Includes tutorial disk.

520STFM Power Pack New Price £349.99

Includes Atari 520 STFM with 1/2 Mg Memory, 1 Mg drive, mouse, joystick and software pack consisting of organiser software First BASIC, First Music and a selection of 20 top quality games.

1040 STFM £449.99

Includes Atari 1040 STFM with 1 Mg Memory, 1 Mg drive, mouse and Business pack which consists of Microsoft Write, Super base personal, VIP Professional and Metacomco Basic.

1040STFM Power Pack New Price £459.99

Includes Atari 520 STFM with upgraded 1 Mg Memory, drive and mouse with software pack. This pack is equivalent to a 1040 STFM with Power Pack software.

Amiga A500 Pack New Price £349.99

Includes best selling Amiga A500 computer with 1/2 Mg memory 1 Mg drive, mouse, Tenstar pack, Photon pain and Modulator.

Atari Mega ST 1+Mono Mon £599.99

The new Mega ST 1 includes separate keyboard and cpu, Blitter chip , clock, 1 MB RAM, mouse and a business software pack including database, word processor, speadsheet and BASIC software.

Atari Mega ST 2+Mono Mon £899.99

The Mega ST 2 includes seperate keyboard and cpu, Blitter chip, 2 MB RAM and mouse. The Mega ST 2 also includes a battery backed clock and business software.

Atari Mega ST 4+Mono Mon £1199.99

The Mega ST 4 includes seperate keyboard and cpu, Blitter chip, 4 MB RAM and mouse. The Mega ST 4 also includes a battery backed clock and business software.

DTP Packs £phone

This pack consists of Mega 2/ or 4, external 3.5"drive / or 30 Mb hard drive, SLM804 Laser printer, Mono monitor, software, 90 days on site maintenance.

Atari Portfolio(pocket pc)£249.99

This amazing hand held computer is fully MS-DOS compatible and has built in software including address book , text editor, diary and a Lotus 123 file compatible spreadsheet. 128K free RAM, 256k ROM

Atari PC 4 (80286) £1499

The PC 4 has an 80286 processor running at 8 or 12 MHz, 1 MB of RAM,60 MB hard drive, 5 AT and 1 XT expansion slots. For Mono monitor add £100. Phone for others.

Atari PC 5 (80386) £2599

The PC 5 has an 80386 processor running at 16 MHz, math coprocessor socket, 64K cache memory, 2 MB RAM, 60 MB hard disk with high performance controller, 4 AT and 1 XT slots. For Mono monitor add £100.

Access VISA

(0772)203166 Fax 561071

Ladbroke Computing International is a trading name of Walton Marketing Limited.

To assist us in processing your order please quote this code. **SST1.3**

manuals? Mr V Smyth, 3 Fleming Drive, Newark, Notts NG24 2BA. Tel 702196

PCW 8256 recent disabled building worker need programs. Any help Loco tips programs. G McGuire, 54 Standard Road, Enfield, Middx. EN5 6DP. Tel: 0992 717199.

AMIGA contacts wanted in Ireland. The Cork region especially. Must be fast and reliable, write to Finbarr, 21 Loretto park, Friars Walk, Cork 4, Ireland. Overseas and all beginners welcome.

BASIC, Cheap Accounts and Invoicing Program wanted for IBM XT PC (MS-DOS) with 40Mb Hard Disk. Must produce printed invoices for home use only. Tel: J.B. (0394) 270151 x270 9am. to 5pm.

ST owner looking for STOS users who are interested. (Am only a beginner) contact Adrian on 0222 567596. Down with Amigas, Hi to Robert H., Ben and Mum, Dad and Emma.

WANTED: Maps of Bloodwych. I'm willing to pay for good maps, so give me a call on 01 876 5497 after 8pm. Ask for Eric.

DOES anyone know of an ST User Group in or about the Portsmouth area? Please contact Steve on Southsea 811321.

WANTED: C64 owners who are interested in programming in M/C. Hints and tips appreciated. Phone Julian on 557121 after 5.30pm or write: 32 Hassell Drive, Easton, Bristol, BS2 0AJ.

ARE there any games for the Atari ST similar to the Repton Series on the BBC? Phone Mike: (0778) 422103.

WILL someone make an .IMG or .D00 or .PI3 file from a 1933 photo please. If so ring (0271) 860738 and I will pay costs and send disk and photo.

WANTED 64 Tape Computing March 1985 issue which included a game called League Soccer. If you have a copy please ring 0634 578958 after 6.30pm ask for Neil.

WANTED URGENTLY for 'Enigma' tape zine:- 128k Spectrum music. Send files on tape to: Jon Rose 14 Lion Road, Nyetimber, Bognor Regis, West Sussex PO21 3JZ (SAE for return).

DOES anyone know how to drive an intigrex colour-jet on the Amiga? If you do please write: Jim Blacker, 17 Belle Vue Terrace, Lancaster LA1 4TY.

AMIGA contacts: swap, buy Amiga books, swap hints and tips on m/c and C. 100% reply. Tim, 20 Cliffe Vale Place, Stoke-on-Trent, ST4 7AN.

I need your views on piracy for 'O' grade project. Any replies will be greatly appreciated. Stuart White, 6 Queens Crescent, New Stevenson, Motherwell, Strath, Scotland, ML1 4JA. Thanks.

HELP hacking deflektor tape to disk. Also Op. Wolf and Renegade on Amstrad CPC 464 + Ram pack. Write: 6 Frank Street, Gt. Horton, Bradford.

WANTED Amstrad CPC6128 user's instruction manual. A. Cresswell, 69 Long Mynd Road, Northfield, Birmingham, B31 1HJ. Tel: 021 476 1542.

HELP needed for Amiga versions of Mercenary 1 + 2, Insanity Fight, Speedball, Populous and Terrorpods. Send to D. Sergeant, 11 Kingsley Close, London N2.

WANTED Boulderdash 3 for C64 on cassette, also does anyone know how to get the Missions on Elite C64 version. Contact Peter, 42 Brightfield Road, Lee Green, London, SE12 8QF.

AMIGA contacts wanted. Tel: (0272) 837252 ask for Simon, no lamers. Greets to Nex, Lance, Sub-zro, Hybrid Cyborg, Jolly Roger, Del, Speedy, Dennis, Jer, Youl, Leigh. Next Day delivery 100%.

AMIGA contacts wanted. The best for demos etc. Hi to Quarley, lads. No lamers, no beginners. 100% Tel: 0272 836696 phone after 6pm and ask for Richard.

WOULD like to hear from any Amiga A500 owners in Cornwall. Contact Chris on 0872 40225. Evenings & weekends.

MIRACOM WS3000. V22. Model one Modem manual wanted to buy or borrow. Literature would be treated with respect. Phone Merseyside 051 677 0396.

HAS any one got (for MSX) full instructions for Knights Knease m/c programme? E.J. Bowman, 5 The Street, Ovington, Thetford, Norfolk, IP25 6RX. 0953 881630.

● FOR SALE

ICL-PC 10Mb hard disk. Microline 83A matrix printer, 6404 colour VDU. 3/4 Meg RAM, CCPM-86 supports, four VDUs each with 4-way multi-tasking, 1 Meg floppy. Buyer collects £720. Phone Mark on 041 959 6732.

ATARI 800, 1050 and 810 disk drives. 850 interface, Centronics printer, cassette, touch tablet plus tons of software, £350. Tel: 0256 473246, ansafone.

CBM 64 data cassette, disc drive, £500 of software + joystick, real bargain, £250. Tel: 0371 873107.

AMSTRAD PC1640 DDMM good condition. Boxed, some software £360 or exchange for Atari 1040 STFM/Porto studio/synth midi gear W.H.Y. Phone: Marc 021 475 4222, anytime.

C64, 1541 II disk drive, data cassette, freeze machine lots of original games, manuals, mags worth over £1500, will sell for £375, o.n.o. Tel: 0892 32911 after 4 pm. Ask for Ashley.

APPLE II Europlus, twin floppies, RAM card, Z80 card, 80 column card, monitor serial port, DOS 3.3, CP/M, Basic, Wordstar, DBase, Spreadsheet, etc. Plus full manuals, £220 o.n.o. Tonbridge 366693, evenings.

AMSTRAD PC2086, 32Mb hard disk (Seagate) 14" colour VGA monitor, some software, perfect condition still boxed £900. Phone 0623 552942. Don't hesitate to leave your name and number.

MACINTOSH II - with keyboard, unit, Apple 12" monitor, datastream tape unit, Imagewriter LQ printer and loads of software, incl. MS-Word, £4000 - Phone Neil Mansell at LFC Insurance Service on (0702) 471717.

DEMOS, 100 disks, 3.5" full of Amiga stuff, used once £100. No offers, no listing, just total lot for sale, £100. Ring Brian 0928 567400. After 8 pm, evenings.

ATARI 800XL, disk drive, cassette deck, Amstrad printer, colour monitor, software packages, five joysticks, games, etc, hardly used, and boxed, first fair offer taken. Tel: 0270 73608 (Paul/Brian).

RAMSOFT
FORMERLY 16 BIT SOFTWARE
UNIT 1 DRAKE HOUSE
160 DRAKE STREET
ROCHDALE
LANCS OL16 1PX
TEL: 0706 43519

* A500 BAT PACK *
A500, TV Modulator, Joystick, Deluxe Paint II.
Interceptor. New Zealand Story, and Batman - The Movie
***** £369.00 *****

A500 BAT PACK +
This Pack as above
Plus Ten Star Pack.
1: Amegas, 2: Art of Chess, 3: Barbarian, 4: Buggy Boy,
5: Ikari Warriors 6: Insanity Flight, 7: Mercenary Comp.
8: Terrorpods, 9: Thundercats, 10: Wizball.
R.S. PRICE ! £389.00

BASIC PACK
As Above Minus Bat Pack. Only a Few left at this price £339.00

MONITOR PACK
Buy any Pack & we will offer a Philips CM8833 for only £210.00 inc. lead.

COMMODORE 1084S £249.00
PHILIPS CM 8833 ! £224.00
All Monitors Include Leads!

Rom Upgrade
Upgrade your 1.2 Kickstart New 1.3 Roms now available.
£24.00

PRINTERS
STAR LC 10 MONO £158.00
STAR LC 10 COL. £199.00

PRINTER RIBBONS
ALL MAKES AVAILABLE, LOW PRICE
EG; STAR LC-10 MONO £4.49.

ALL OUR PRINTER PRICES ARE INCLUSIVE OF LEADS

Q.tec 1 MEG 3.5" EXT. DRIVE, Low Power, Throughport, Slimline, Only £79.95
BULK 3.5" DISKS X10 + LABELS. ONLY ! £7.99 - 100 CAP DISK BOX £9.00
JOYSTICKS... KONIX NAVIGATOR £12.95....QUICKSHOT II TURBO £9.99

ACCESS VISA & STYLE WELCOME

Please note, all our prices include VAT & Courier Delivery. All items despatched within 24 hrs, dependant on availability & cheque clearance, prices subject to change without prior notice at any time. E & OE.

Shekhana Computers

Sony disks 3.5" DSDD box of 10.....£9.99
JVC disks 3.5" DSDD box of 10.....£8.99
JVC high density 3.5" DSHD X 10.....£24.99
Sony unbranded bulk 3.5" DSDD X 10..£6.99
JVC 5.25" high density DSHD X 10...£10.99
Maxell 5.25" high density DSHD X 10.£10.99
Unbranded 5.25" DSDD box of 10.....£4.99
Maxell 3" CF2 box of 10.....£24.99
JVC 5.25" DSDD X box of 10.....£6.99

All disks are genuine and guaranteed by us.
Cheque/P.O payable to SCS (E), 655 Green Lanes, London N8 0QY.
Access and Visa cards accepted. Ring 01-348 2907, 01-340 8565.
Fax your order to - 01-889 9413. Please add 50p P+P per box of 10 disks.

S.F.A. COMPUTERS
NOW AVAILABLE! THE CLIPPER AT. P.C. KIT
Everything you need to build a Powerful AT style Computer in one package including full instructions and step by step video.

Kit comes with Motherboard, 200W Power Supply, AT Case, 1.2MB Floppy Drive, Floppy Controller, Videocard, Serial + Parallel Ports + Games Port, Samsung FST Monitor,1 Mb RAM, 102 Key Keyboard, MSDOS 4.0, Award Bios + All Manuals.

PRICES
80386 SX/16 MHz £875 + VAT. 80286/ 12MHz £699 + VAT.
80386 /20MHz £1149 +VAT

A special Preview Video is available for just £2.95.
Please note Educational Discount available.
All enquiries to:
SFA COMPUTERS
UNIT 15, ABBEY MILL BUSINESS CENTRE,
PAISLEY, SCOTLAND. PA1 1JN
Telephone: 041 840 1477

VISA
Access
We Accept EXPRESS VOUCHERS

COMPUTERS SADDLER COMMUNICATIONS

Our Showroom is only 1 mile from Junction 23, M6. Just past, Haydock Park Racecourse.

Telephone: (0942) 719122 (4 lines)
Fax: (0942) 271226

We Accept Express Vouchers

SADDLER COMPUTER SERVICES LTD. 71/77 WARRINGTON ROAD, ASHTON-IN-MAKERFIELD, LANCS, WN4 9PJ

AMIGA B2000 RANGE

BUNDLE	INCLUDES	SADDLER PRICE	R.R.P.
XTD	B2000 with 1084 P. Monitor, XT Bridgeboard with 5.25" Floppy Disk 20Mb, MSDOS HD+ Controller Superbase Personal (Database)	**£1175.00**	**£2063.99**
ATHD-20	B2000 - 1 Meg, Chips, 1084D Monitor, 20Mb, Autoboot Amiga HD + Cont, AT (80286) Bridgeboard 1 Meg RAM Superbase Personal (Database)	**£1989.00**	**£2534.40**
ATHD-40	As above but with 40Mb, HD + Controller.	**£2238.00**	**£2881.20**
Amiga Colour Monitor		£235.00	£260.86
Amiga 8Mb Expansion with 2Mb		£459.00	£649.00
Amiga 'XT' Bridge Card with 360k 5.25" HD 512k ROM		£375.00	£528.00
Amiga 'AT' Bridge Card - 1-2Mb 5.25" HD. 1Mb RAM		£588.00	£749.00
Amiga 20Mb MSDOS Hard Drive		£274.00	£350.00
Amiga 20Mb Hard Drive		£314.00	£400.00
Amiga 20Mb Auto Boot Hard Drive		£495.00	£639.00
Amiga 40Mb Auto Boot Hard Drive		£798.00	£1052.00
Amiga Pal Composite Hard Card		£76.00	£99.00
Amiga Internal Genlock		£176.00	£249.00
Amiga Internal 3.5" Floppy Drive		£109.00	£140.00
Amiga External 3.5" Floppy Drive		£69.00	£99.00
Amiga 68020/68881 Co. Proc. with 2Mb RAM		£975.00	£1405.00

AMIGA A500 RANGE

BUNDLE	INCLUDES	SADDLER PRICE	R.R.P.
BAT PACK	A500 Computer, A520 TV Modulator, D.Paint II, Batman: The Movie. Interceptor, New Zealand Story	**£318.00**	**£346.95**
EDUCATIONAL CLASS OF THE 90's PACK	**HARDWARE** A500 Computer, Midi Interface. **SOFTWARE** D.Paint II, Superbase Personal, Publishers Choice, Maxiplan 500 (Spreadsheet) Arts Midi Recording Studio, Amiga Logo, BBC Emulator V.2, BBC Programs. **EXTRAS** 10 Blank Disks, Mouse Mat, Diskette Wallet.	**£459.00**	**£499.00**
3.5" Drive for Amiga A500/A2000		£68.00	£86.94
A501 1 Meg RAM		£117.00	£130.43
A520 Modulator		£19.00	£21.72
Philips 8833 Stereo Colour Monitor		P.O.A.	£260.88
A590 20Mb Hard Drive		£314.00	£400.00
Minigen Genlock		£83.00	£100.00
Star LC10 Mono Printer		£129.00	£199.00

12 Months Repair Warranty via Granada Computer Services. Tel: 0344 484648

ATARI ST RANGE

520ST EXPLORER PACK	520STFM Computer, Mouse, Cont., TV Modulator, Tutorial Program, Arcade Game, Ranarama & Assembler	**£239.00**	**£260.86**
520 ST POWER PACK	New 1 Meg Drive CX10 Joystick - Plus £400 Pack of Third Party Software	**£299.00**	**£347.82**
Atari 1040 STFM Computer		£375.00	£434.77
Atari 1040 STFM & Mono Monitor		£449.00	£521.73
Atari 1040 STFM & Colour Monitor		£525.00	£628.69
Atari 2Mb Mega ST		£667.00	£769.36
Atari 4Mb Mega ST		£899.00	£1069.56
Atari 12" High Res. Mono Monitor		£113.00	£130.43
Atari 14" Med. Res. Colour Monitor		£299.00	£347.82
Cumana CGA354 3.5" Double Sided Floppy Disk Drive		£73.00	£86.09
Atari Mega File 30Mb Hard Drive		£379.00	£433.91
Atari Mega File 60Mb Hard Drive		£527.00	£599.00
Atari SLM804 Laser Printer		£995.00	£1199.99

LEISURE SOFTWARE FOR AMIGA ATARI

NOTE THESE PRICES INCLUDE VAT

TITLE	AMIGA		ATARI	
	SADDLER	RRP	SADDLER	RRP
Populous	£19.98	£24.99	£19.98	£24.99
Batman the Movie	£19.98	£24.99	Out	soon
Robocop	£19.98	£24.99	£16.22	£19.98
Blood Money	£19.98	£24.95	£19.98	£24.95
Altered Beast	£19.98	£24.99	Out	soon
Pirates	Out	soon	£19.98	£24.99
Xenon II	£19.98	£24.99	£19.95	£24.99
Shadow of the Beast	£27.94	£34.99		
Bangkok Knights	£19.98	£24.99	Out	soon
The Promised Lands	£7.98	£9.99	£7.98	£9.99
Forgotten Worlds	£16.22	£19.99	£16.22	£19.99
Paperboy	£16.22	£19.99	£16.22	£19.99
Kick Off	£16.22	£19.99	£16.22	£19.95
F-16 Combat Pilot	£19.98	£24.95	£19.98	£24.95

ALL PRICES EXCLUDE VAT (except leisure software) & CARRIAGE

E&OE All prices and manufacturers specifications subject to change without notice.

Large range of software available for Amiga, Atari & PC's.

Trading Hours: Mon: 2pm - 5.30pm, Tues - Fri: 9am 1pm, 2pm - 5.30pm. Sat: 9am - 5pm

DELIVERY
UK MAINLAND
(ALL PRICES + VAT)

HARDWARE: 4 Working days £7 per box, Next Day £12 per box
SOFTWARE: 4 Working days £4 per order (Recorded)
Buy 3 titles - carriage free

We Accept Express Vouchers

Payment by Cheque: Goods despatched when cheque cleared. Express clearance charge or phone us with your Access/Visa details

VISA

COMPUTER REPAIRS & SALES

* AMIGA * ATARI * COMPETITIVE PRICES *

All types of home computers: Amstrad, Sinclair, etc. - prices from £7.00 inc.VAT and post and packaging and three month guarantee.
Also available: spares, software, cables, peripherals, etc.
WE STOCK SAGE BUSINESS SOFTWARE
SALE OF AMIGA AND ATARI COMPUTERS
Tel: (0702) 618455 for immediate estimate

THE COMPUTER FACTORY, Analytic House Unit 18A, Grainger Road Industrial Estate, Southend-on-Sea, Essex.

£8.00 per 10 3.5 DS/DD disks all inc.

3.5: £8.00 per 10, £15.80 per 20, £23.80 per 30, £36.80 per 50. 3.5 80cap. box:£6.50 (add £2.50 for P&P if not ordering disks). 3.5 10cap. flip vision box £1.30 all inc. (or £1.00 per box for every 10 disks ordered). 5.25: £3.60 per 10, £7.20 per 20, £14.50 per 40, £26.00 per 100. all inclusive 5.25 100 cap. box:£6.50 (or add £2.50 as above). Our disks specified here are 900K unbranded and manufactured by Verbatim / Sony to the highest degree, they are completely 100% error free, with a full lifetime guarantee which means full replacement or moneyback. We won't settle for anything less than high quality for our systems and neither should you, and as we now supply thousands nationally within both the professional music and computer industries, it seems they won't settle for anything less either. All disks are despatched sameday and include vat, P&P and also come with user labels. If you are serious about your computer you should be serious about your disks too. Your new national independent has the best ever prices on all your hardware/software requirements. Atari, Antic, Amiga, C-Lab, Dr T, Electronic arts, Gold Disk, Hybrid Arts, Infogrames, Steinberg, Star, Migraph, and many more. Midi music specialist. Phone now or send in your order with cheque/PO for immediate despatch to:

joy of life arts, (dept nce), 45 elswick, skelmersdale, lancashire, wn8 6bx.
telephone : 0695 24732.

SOFTCELL SUPER SAVERS PC SHAREWARE

£1.75 Per Disk Fully Inclusive

Copy Master	£1.75	Word Games	£1.75
Tree View	£1.75	PC Dash Board	£1.75
Peasy Dos	£1.75	Thesaurus	£1.75
Dos Tech Ref	£1.75	STD Codes	£1.75
OS II Manual	£1.75	+ 100's more	

PC & AT Range
* Quality
* Value
* Free Software

SCHNEIDER COMPUTERS

10 5/14 Discs £16.00, 10 3 1/2 Discs £25.00. For further details write or phone for a FREE catalogue!
Softcell Services, Dept NCE, 9 St Wells St, Cardiff. CF1 8DW
Tel: Cardiff (0222) 222895 *anytime*

SPECTRUM UTILITIES USEFUL & "OUTLET!" GRAPHICS INFO AND IDEAS!!

INTERESTING HOMEGROWN SOFTWARE!!

Monthly since 1987 - now on ALL of the popular SPECTRUM systems!

SPECIAL OFFER - First-time buyers send only £2.50 for the latest issue on.....

PLUS 3 DISC, DISCIPLE/PLUS D, OPUS, MICRODRIVE OR TAPE!!

Chezron Software, 605 Loughborough Rd., Birstall, Leicester, LE4 4NJ

HINDLEY ELECTRONICS

SAME DAY SERVICE (CALLERS) C64 ONLY — FAST — 24hr TURNAROUND (POSTAL) C64 ONLY

EXPERT COMPUTER REPAIRS COMMODORE-SINCLAIR-ACORN
Standard Charges (inc. VAT and fully insured return postage.)

Commodore 64	£25.00	Spectrum +2	£25.00	Amiga 500	£40.00
Commodore +4	£25.00	Commodore 64C	£29.00	Acorn Electron	£26.00
1541 Disc Drive	£32.50	Commodore Vk 20	£18.00	Amiga 500 Disc Drive	
Spectrum 48K	£18.00	Commodore 128	£32.00	Replacement	£65.00

3 MONTHS NO QUIBBLE WARRANTY ON ALL REPAIRS.
Computer ICS & General Components. Why pay more? (Please ring before posting goods)
DEPT NCE, 97 MARKET STREET, HINDLEY, WIGAN WN2 3AA. TEL: 0942 522743

WANTED FOR CASH

IBM COMPATIBLE COMPUTERS & EQUIPMENT
JOB LOT BUYER OF HARDWARE & SOFTWARE

SPECIAL OFFER

EASYWRITER 2 WORDPROCESSOR
ONLY £45.00

FOR YOUR BEST POSSIBLE DEAL CALL

EXPRESS COMPUTERS
(0604) 35519 OR FAX 35540

DAVID OR CHRIS
(DEPT NCE)

ALL COMPUTER HARDWARE AND SOFTWARE WANTED FOR CASH OR EXCHANGE

NOTHING REFUSED!!

01 727 0424

Microware Computer Services Est 1987. P.O. Box 2, Skegness, Lincs, PE25 2QL
Tel: 0754 610217

Batpack Amiga 500 TV modulator, Batman The Movie, DPaint II, Intercepter, New Zealand Story - £389.00
Commodore 64 light fantastic pack, tapedeck, light gun, 3D glasses, 6 games - £149.00

Archimedes 3000 1Mb RAM Super Computer	£699.00	Atari 520 STFM power pack	£359.00
Atari1040 STFM professional pk	£449.00	Atari mega ST professional pk	£529.00
Amiga Powerdrive 3 1/2 inch on/off Thr port	£79.00	Cumana 5 1/4 inch Amiga drive	£129.00
Amiga A500 512K RAM pk + clock	£119.00	A590 20Mb hard disk 2 Mb RAM OK	£379.00
Star LC10 printer	£179.00	Star LC10 colour version	£229.00

All products are UK spec., not unreliable imports
Phone for products not listed. Prices fully inclusive.

SOUTHEAST KENT SOFTWARE

78, Southfleet Road, Orpington, Kent. BR6 9SW.
0689 50204

Amiga 500 + FREE T.V. Modulator	£350.00
Atari 520 STFM Superpack	£360.00

30% OFF ATARI/AMIGA GAMES

Vigilante	£11.50
The Last Crusade	£13.95
Licence to Kill	£13.95

Business Software for Amstrad PCW, Atari & Amiga

SEGA SOFTWARE 10% OFF RETAIL PRICES

Vigilante	£22.00
California Games	£22.00
Outrun 3D	£22.00
Altered Beast	£22.00

Joystick 20% off Retail Prices

Cheque or P.O. payable to: J Ferguson

THE CHIP SHOP (SEMICONS) LTD

DO YOU NEED INTEGRATED CIRCUITS ? TRY US !

WE HAVE A FULL RANGE OF TTL, CPU'S, EPROMS, RAMS ETC
PLUS MEMORY UPGRADES FOR MOST MICROS.
FOR EXAMPLE V20 - 8 - 10.50
V30 - 8 - 10.50
Spectrum ULA - 6.50

SEND SAE FOR FULL LIST
6 BEAN LEACH DRIVE, OFFERTON, STOCKPORT, CHESHIRE, SK2 5HZ
VISA ACCESS HOTLINE 061 - 483 - 1989

VISA

Dungeon Mail Order Dungeon Packs

NEOPHYTE PACK	JOURNEYMAN PACK	ARCH MASTER PACK
Dungeon Master Dungeon Editor Secrets of the Dungeon 2 Disk Save games	Dungeon Master Secrets of the Dungeon Wandering Disk	Chaos Strikes Back Secrets of the Dungeon 3 blank disks for saving
£34.99	£29.99	£24.99

28, Watergate Lane, Wollton, Liverpool, L25 8QJ

BOOKS ON DISK

Now available on 5.25" disk for IBM PC and Compatibles

CARMILLA AND OTHER DISTURBING TALES

THIS DISK CONTAINS FOUR EERIE STORIES BY the acclaimed writers. J. Sheridan Le Fanu and Bram Stoker.
USING OUR SYSTEM READING FROM YOUR SCREEN IS AS EASY AS PICKING UP A NOVEL!
(Facility for printing entire book included)
Send cheque/P.O for £2.95p (Eire/EEC add 20p) or credit card details (incl. expiry date) to:-
BLYTHE PUBLISHING - 8 GLENNOR CRESCENT WEST - CARRYDUFF - N.IRELAND - BT8 8JF
IMMEDIATE DISPATCH BY FIRST CLASS POST ORDER FROM PRESTEL NO. 390502.
24 HOUR CREDIT CARD ORDERLINE 0232 813290

VISA

YOU SAW THIS SPACE!

So Do 24,637 other prospective buyers every week!

To find out how this space could work for you, CALL HELEN KIRKHOPE on (0225) 446034

SAMDALE COMPUTERS

24 HOUR ANSAFONE **(0621-742617)** ACCESS & VISA ACCEPTED

FAST, FRIENDLY & RELIABLE ORDERING SERVICE FOR GAMES, EDUCATIONAL & BUSINESS SOFTWARE ON

Amiga - ST - IBM PC - C64
Amstrad - SEGA
PC Engine - MSX
SEGA Megadrive ...

HUGE DISCOUNTS UP TO 25%
PHONE NOW FOR FREE CATALOGUE

MAIL ORDERS TO:
1A AUSTRAL WAY
ALTHORNE
ESSEX. CM3 6DN

LOOK! ATARI ST USERS....QUALITY PRODUCTS FOR BUSINESS AND PLEASURE

Word Processors	RRP	OUR'S
First Word Plus V3	79.95	62.39
Protext V4.2	99.95	77.96
Languages	**RRP**	**OUR'S**
Mark Williams C	129.00	99.95
Hisoft Power Basic	49.95	38.99
Hisoft Basic	79.95	62.39
Hisoft C Interpreter	49.95	38.99
GFA Basic	59.95	46.79
Personal Pascal	79.95	62.39
Business	**RRP**	**OUR'S**
Sagesoft Bookkeeper	113.85	88.80
Protext Office	34.95	27.26
Spreadsheets	**RRP**	**OUR'S**
Mini Office Pro.	24.95	19.46
Masterplan	88.95	70.16
Databases	**RRP**	**OUR'S**
Timeworks Data Manager Pro.	69.95	54.56
Superbase Personal	59.95	46.76
Superbase Personal II	99.95	77.96
Protext Filer	24.95	19.46
Development	**RRP**	**OUR'S**
Hisoft Devpack V2	59.95	46.79
Hisoft Werks	29.95	23.36
GFA Basic Compiler	29.95	23.36
Hisoft Tempus 2 Editor	39.95	31.17
Desktop Publishing	**RRP**	**OUR'S**
Fleet Street Publisher	125.00	97.50
Timeworks DTP Special (Free copy of Easy Draw 2 worth 59.95)		89.00
Miscellaneous	**RRP**	**OUR'S**
Hisoft Turbo ST	39.95	31.17
Hisoft Twist Switcher	24.95	19.46
1st Mail (1st Wrd Mailmerge)	14.95	11.66
Star Struck (Astrology)	24.95	19.46
Super Charged Easy Draw II	99.00	77.22

All prices include VAT. Please send cheque/P.O. Made Payable to:
RAMARA HOUSE SOFTWARE, 22 Grange Road, Staincliffe,
Nr Batley, West Yorkshire. WF17 7AT
CREDIT CARD SALES: **0924 473556** Visa/Access/Mastercard
24 Hr. 7 day week service. (Answerphone after 7 pm and Sundays)
Wherever possible items will be despatched same day by First Class Post.

ASTROLOGY for beginners

Teach yourself astrology using your Computer

Buy a Starter Pack comprising a simple program to calculate a horoscope, an introductory booklet and 2 self-teaching programs (how to interpret the horoscope)
ONLY £12.50 No previous knowledge required
For ALL Amstrads, Atari ST's, BBC, Spectrum, C64, Dragon, MSX and IBM.

Payment by Access/Visa, Cheque, P.O. PLEASE STATE MAKE OF COMPUTER or send s.a.e. (about 9" x 7") for free catalogue giving details of our wide range of programs for **PROFESSIONAL ASTROLOGERS** *including complete natal interpretations and forecasting.*
Also **I CHING, GRAPHOLOGY, BIORHYTHMS, etc.**

ASTROCALC
(Dept NCE) 67 Peascroft Road, Hemel Hempstead,
Herts HP3 8ER England. Tel: 0442 51809

Eigen PD Software

Public Domain & User-Supported Software
for the IBM PC Compatibles

£1.95
Per Disk (5 1/4")

Phone or send an A5 SAE for your FREE Catalogue of one of the Country's largest and best documented PD/Shareware Collections.

	5 1/4"	3 1/2"
1 Disk	£1.95	£2.50
5 Disks	£8.00*	£12.00
10 Disks	£15.00**	£22.50

* Includes FREE Library Case
** Includes 2 FREE Library Cases

Unlike other Libraries, we don't have any "hidden" costs, like VAT, P&P, Membership Fees, 0898 phone numbers etc.
The Price You See Is The Price You Pay

Blank Disks: 5 1/4" DS/DD £9.50 for 25
3 1/2" DS/DD £10.50 for 10

Disk Head Cleaning Kits £3.50 (State 5 1/4/3 1/2")

PO BOX 722, SWINDON, SN2 6YB. 0793 611270 & 061 748 4274

Multiworld Trading Company
(UK limited)

WE ALWAYS HAVE IN STOCK, LIQUIDATED AND REDUNDANT NEW AND SECOND USER TOP QUALITY COMPUTERS AT PRICES WE DARE TO ADVERTISE.
Every machine is checked out before collection.
Warranty available on certain machines
RIGHT NOW WE HAVE:

IBM PS2 Model 30/26, IBM PS2 Model 50, IBM PS2 Model 50Z, IBM PS2 Model 70, IBM Model 60, IBM AT's, IBM XT's, IBM PC's

AMSTRAD (all ranges), APRICOT (all ranges including 386), Compaq, Toshiba portable computers, Zenith portable computers, APPLE (most of latest including Machintosh), EPSON printers always available, STAR printers, HP laser printers, CANON laser printers, D/RAM memory chips, Math Co-Processors.

WE ALWAYS HAVE IBM COMPATIBLE COMPUTERS IN STOCK

FOR ALL YOUR NEEDS, BUYING OR SELLING, PLEASE CONTACT US ON 01-360-3305 FAX:01 360 3757
OFFER OF THE MONTH
VGA COLOUR MONITOR.....£199.00 + VAT
GROUP 3 PORTABLE FAX MACHINE - BT APPROVED.....£399.00 + VAT
HURRY AS STOCK IS LIMITED!
TRADE ENQUIRIES ARE ALWAYS WELCOME ON 01-360-8095

SuperMaths

Specially written for Amstrad PCW's, PC's and compatibles. User friendly, enjoyable package: multiplication (including tables), division, addition and subtraction - 4 levels of difficulty - ages 5 upwards. Scores shown, success rewarded. PRACTICE and TEST (timed). WORKSHEET produces worksheets on printer with choice of styles, with separate answers.
Can provide hours of fun improving numeracy
Price (inc VAT/P&P) £18.95 (PC) and £14 .95 (PCW). *Cheques to* **Abacus Software**, Dept NCE, 11 Woodcote Drive, Orpington, Kent BR6 8DB
Proprietor: JD Charlton

COMPUTER REPAIR SPECIALIST

**** SALES AND SERVICE ****
Acorn - Amstrad - Sinclair - Commodore, etc.
NO FIXED PRICE FOR REPAIR
We charge just £15 labour plus the parts cost
eg: Com 64 - 1 ram chip faulty
Parts £2.00
Labour.....£15.00
Total Cost £17.00

Please phone before posting
P & J ENTERPRISES
18 Anston Ave, Worksop, Notts S81 7HT. Tel: 0909 483255

WIZZARD COMPUTERS

HOME AND BUSINESS SYSTEMS
Full Range of PC's In Stock
Commodore Amiga A500 - £369 inc VAT
Atari 520STFM from £269.00 inc VAT
Phone for details of all stock

We Accept EXPRESS VOUCHERS

WIZZARD COMPUTERS
93 Graham Street, Airdrie, Scotland ML6 6DE
Telephone: 0236 47097

ELECTRIC PD MAIL ORDER

Write or phone for your FREE price list quoting the name of your computer

	Comm. 64	Amst.	Spec.	Amiga.	ST.
Pacamania	£6.95	£6.65	£6.65	£13.95	£13.65
Thunderbirds	£6.95	£6.95	£6.95	£17.50	£16.50
Robocop	£6.95	£6.95	£6 95	£16.40	£13.65
Spitting Image	£6.95	£6.95	£6.95	£14.50	£13.95
Operation Wolf	£6.95	£6.95	£6.65	£16.50	£13.65

Prices include VAT and UK Postage & Packaging. Europe - add 70p per game. Outside Europe add £1 per game.
Cheques and P.O.'s to:

ELECTRIC P.D.
7 Park Road, Haltwhistle,
Northumberland, NE49 9AR
Tel: (0434) 321942

NOW COMPATIBLE WITH 48K!!!

Enigma tape tapezine issues 3 & 4 now run on the 48k Spectrum as well as the 128k, +2 and +3! Issue 4 has just become available and features: **EXCLUSIVE** preview of Hyperlane by Alternative. **EXCLUSIVE** interview with Mike Gerrard.
NEW! adventure column.
PC Show report

Only £1.99 on tape from:	+3 disks out soon from:
Dept NCE,	**Dept NCE**
15 Westfield Road, Inverurie,	**57 Lovers Walk, Dunstable,**
Aberdeenshire	**Bedfordshire LU5 4BG**
AB5 9YR	**Costing £3.50**
	All cheques etc payable to ENIGMA

ADVANTAGE PC SHAREWARE

- POPULAR TRIED & TESTED PROGRAMS
- FAST DESPATCH - FIRST CLASS
- EASY TO RUN AND USE

NEW!
ATARI OWNERS CALL FOR YOUR **FREE** PUBLIC DOMAIN SOFTWARE CATALOGUE ON 0242 224340

OUR PRICES INCLUDE VAT AND POSTAGE

5 DISCS	£13.25
4 DISCS	£11.25
3 DISCS	£9.45
2 DISCS	£6.95
1 DISC	£3.95

Over 5 Discs £2.50 each
for 3.5" Please Add £1 per Disc

CALL 0242 224340 NOW!
FAX: 0242 226755

WORDPROCESSING

- PC-WRITE The well-established multi-function WP
- PC TYPE+ Popular WP, Spell Checker, Undo, Help. 4 DISCS
- PC TYPE II Great new WP from Buttonware. 4 DISCS
- GALAXY Like WordStar with pull-down menus. 2 DISCS
- MINDREADER Clever WP anticipates what you're typing
- PC-OUTLINE Popular brain-storming ideas processor
- SPELLING CHECKER For most WP's. Can update dictionary
- THESAURUS Great when searching for alternative words
- TYPEWRITER EMULATOR For quick messages, envelopes etc

SPREADSHEETS

- PC-CALC+ Well-known Buttonware spreadsheet. 3 DISCS
- AS-EASY-AS Popular and easy to use. 123 Compatible
- GOALSEEKER Time-saving program helps create spreadsheets
- PIVOT! Prints spreadsheet in landscape or portrait mode

DATABASES

- PC-FILE+ Very popular database with mailmerge. 3 DISCS
- PC FILE-dB dBase power at shareware prices. 3 DISCS
- WAMPUM Implements dBase III language-hard disc. 2 DISCS
- RECORD COLLECTOR Catalogue and sort your LP's & CD's
- HOME VIDEO Catalogue and sort your videos. 2 DISCS
- GENE GENIE Outstanding, new genealogy program. UK author. 2 DISCS
- FAMILY HISTORY Comprehensive genealogy program. 2 DISCS

HOME & BUSINESS

- FREEWAY CASHBOOK UK home account and budget. 3 DISCS
- FAST BUCKS Full feature account and budget. 2 DISCS
- HOME INVENTORY/HOME INSURANCE Log your assets
- FREEWAY ACCOUNTS PLUS Popular UK Package with Sales, Purchase & Nominal Ledgers. 3 DISCS
- FREEWAY PAYROLL designed for UK businesses. 3 DISCS
- 100 STANDARD BUSINESS LETTERS to use and adapt
- EZ-FORMS standard business forms to use and adapt
- LABEL MAKER Simple mailing label database and printing
- PROJECT MANAGEMENT Critical Path Analysis, Gantt Charts
- PRO-COMM UK Definitive communications program.
- EAZI-LINK Supports Prestel and ViewData comms. 2 DISCS
- PC-DESKTEAM Handy calculator, notepad, diary. Mem-res
- HOMEBASE The shareware answer to Sidekick. 3 DISCS
- POWER MENU Recommended hard disc menu from Brown Bag
- PACKDISC Economise space and speed up your hard disc
- FLEXIBAK A fast easy to use hard disc backup program

EARLY LEARNING (AGE 3-8)

- AMANDA'S LETTER LOTTO Keyboard and letter skills
- ABC FUNKEYS Entertaining way to learn the alphabet
- AMY'S FIRST PRIMER Basic arithmetic and letters
- CHILDREN'S EDUCATION Teaching while at play:- Alphabet, Animals, Clockgame, Hangman and Mosaic
- NUMBER PRIMER A good way to learn basic numeracy
- WORD PRIMER A good way to learn words and spelling
- ANDY'S WORD GAMES 7 UK programs on using words

EDUCATION (AGE 5-ADULT)

- EXPLORING WORDS Hangman, Spelling, WP, Letterfall
- EXPLORING MATHS Funnels & Buckets, Algebra, Prime
- EXPLORING TIME Telling, Speaking, World Timezones
- EXPLORING SCIENCES Physicalc, Equator, Planets
- EXPLORING YOUR IQ Brain-boggling tests and puzzles
- EXPLORING ELECTRONICS From Ohm's Law to Amplifiers
- EXPLORING GEOGRAPHY Gazetteer, 3D-World, Weather
- EXPLORING HISTORY Quiz on early American History
- EXPLORING MUSIC Player Piano, Composer, Polyphony
- EXPLORING GRAPHICS Animator, Etch-A-Sketch, 3DStar
- EXPLORING COMPUTERS Beginners guide to computers
- WIZ QUIZ Teaches maths in an entertaining way
- MATHS TUTOR Arithmetic through to higher maths
- STATISTICS Data manipulation & analysis. 3 DISCS
- PROBABILITY & STATISTICS curve-fit & simulation
- X-Y SEE Teach & test maths using graphics. 2 DISCS
- ELECTRONICS Multi-tool package for engineers
- PHYSICS GCSE REVISION A novel aid to study. UK
- COMPUTER SCIENCE GCSE REVISION Study aid. UK
- Learning a foreign language? Then try this selection of tutorials - each title on its own disc:-

★ FRENCH ★ SPANISH ★ ITALIAN ★ GERMAN ★ HEBREW
★ CANTONESE ★ SPANISH FOR TRAVELLERS
★ FRENCH VERBS ★ SPANISH VERBS ★ JAPANESE
★ FRENCH HANGMAN

PROGRAMMING

- SMALL C COMPILER C for yourself how to program in C
- PD PROLOG for Artificial Intelligence. 2 DISCS
- PASCAL COMPILER Good introduction to popular language
- MODULA-2 COMPILER with editor and linker. 2 DISCS
- LADYBUG LOGO Graphic educational language & examples
- CHASM Assembler with tutor for learning 8086 code
- A86/D86 Best shareware assembler & debugger. 2 DISCS
- BASIC TUTOR Useful introduction to standard PC BASIC
- GETTING STARTED IN C Introductory lessons and examples
- GETTING STARTED IN ASSEMBLER Useful introduction
- C & TURBO C TUTOR with source code examples. 2 DISCS
- PASCAL & TURBO PASCAL TUTOR with examples. 2 DISCS
- MODULA-2 TUTOR with source code examples. 2 DISCS
- WINDOW BOSS Produce professional windows in C. 3 DISCS
- C TOOLS Source code for many programs in C. 2 DISCS
- TURBO PASCAL TOOLS Packed with source code. 4 DISCS

UTILITIES UNLIMITED

- ESSENTIAL UTILITIES Over 50 of the best utilities
- ADVANCED UTILITIES A more specialised collection
- TEXT PROCESSING UTILITIES Printer Control, Spooler, Sideways, Tally, Word Counter, Fog Finder, Lister
- LASER PRINTER FONTS & UTILITIES. 3 DISCS
- DISK COMMANDO Similar to Norton Utilities. 2 DISCS
- PROFESSIONAL MASTERKEY Powerful disc/file editor
- FLU-SHOT+ Helps you deal with and avoid PC viruses
- LQ Set of printer fonts to enhance your text output
- SIGNSMITH Create posters, leaflets and letter heads
- BRADFORD Typesetting quality on a dot matrix printer
- EZ-FORMAT Fast disc formatter - about 33% faster
- EZ-COPY LITE Fast multicopy from one read of master
- PC TESTER Test your PC's performance. 2 DISCS

GRAPHIC DESIGN

- DANCAD Accurate 3D frame drawing & animation. 2 DISCS
- IMAGE-3D create effective 3D drawings on CGA or EGA
- PC-KEY-DRAW The very popular Desk Top Publisher and scaled drawing package. 3 DISCS
- PC-KEY-DRAW LIBRARY Picture & Font Library Utilities
- FINGERPAINT Painting program runs on MSDOS not GEM
- FONT EDITOR Create your own on-screen character set
- EGA FONT EDITOR with several new fonts supplied
- FLO-DRAW Flow diagram text & graphics editor. 2 DISCS
- GRAPHIC ANIMATOR Create animated picture sequences.

Join the Advantage Independent Computer User Group and choose any Shareware discs for just £2 each (3.5" £3)
★ PLUS ★ Monthly Newsletters
★ PLUS★ Discounts on Software
★ PLUS★ Technical Support & Advice
Annual Membership is:
£15 (EC Countries) £18 (Non-EC Countries)

Order by post or telephone. We accept Sterling Cheques, Postal Orders, Eurocheques, Access and Visa

INFORMATION SYSTEMS

- MOVIE DATABASE Over 3000 films & videos. 2 DISCS
- GIFT IDEAS GENERATOR For birthdays & Christmas
- WORLD ATLAS Display map of any part of the world
- MICRO COOK Get your recipes organised
- NIGHTSKY Definitive computer planetarium UK. 2 DISCS
- HOROSCOPE Prints horoscope and astrological data
- ASTROL-95 Astrological charts & horoscopes. 2 DISCS
- BIORHYTHM MONTHLY Plot your biorhythms and compare
- GARDENER'S ASSISTANT Plan and plant your vegetables
- BARTENDER Learn how to mix those exotic cocktails
- WEIGHTWATCHER Control calories and lose weight
- FOOD & SMOKING ANALYST Info for calorie conscious

SPECIAL INTEREST

- PC-SPORT Useful PC-based league table generator
- PUNTER'S PAL Aims to improve your betting odds
- COMPOSER Create, edit and play your own tunes
- PIANOMAN Turns your PC into a musical keyboard
- CROSSWORD SOLVER and Anagram Generator
- CROSSWORD CREATOR Make your own puzzles. 2 DISCS
- KING JAMES OLD TESTAMENT Complete text. 5 DISCS
- KING JAMES NEW TESTAMENT Complete text. 4 DISCS
- BIBLE READER with index and text reader. 5 DISCS
- GOSPEL CONCORDANCE For studying/comparing. 3 DISCS

BOARD & CARD GAMES

- PC-OPOLY PC version of the well-known board game
- SCRABBLE Good implementation - updateable dictionary
- WORLD DOMINATION The classic game of Risk and strategy
- SLEUTH Exciting murder msytery solving game
- CHESS & CHECKERS Quality graphics versions of games
- GAMBLER'S DEN Craps, 21, Poker and Pontoon
- CARD SCHOOL Canasta, Gin Rummy, Heart and Lowball
- PUB GAMES features Dominoes and Cribbage

SIMULATIONS & ARCADE GAMES

- BASEBALL You act as manager, with choice of teams
- INSTANT REPLAY American Football simulation
- RAILROAD SIMULATION Novel set of animated layouts
- WAR GAME Strategy game based on war games rules
- FORD SIMULATOR Test drive a selection of Ford cars
- SOCCER GAME Manage your own soccer team to Div. 1
- MEGALOPOLY Speculate and be a big business tycoon
- STAR TREK puts you in command of the Enterprise
- STAR TREK II The next generation - with new gameplay
- PINBALL WIZARD Five different pinball machines
- CAPTAIN COMIC High quality animated graphics
- SNARF multi-level treasure-hunt game for EGA
- DRACULA IN LONDON role-playing game based on novel

PROJECTS & PASTIMES

- PC JOKES Hotboot, Insults, Drain, Locust, Hotlot
- Alien Name Generator, BackTalk, Buzzword Generator
- PC JOKES II April Fool, Deceive, Busy, Soap Opera Plot Generator, Headline Generator, Jive Talk, Madlib
- PAPER AEROPLANES Loads of designs ready to print out
- ORIGAMI Study the oriental art of paper folding
- POET'S CORNER Produce computer-created poems. 2 DISCS
- GET LUCKY Rather naughty Adult Trivia & Strip Poker
- PIN-UPS Selection of pin-up pictures to view or print
- ADULT HUMOUR Large collection of rather rude jokes
- ADULT ADVENTURES Bad-Bad, Drive-In and Fifi
- ADULT GAMES features rude Space Invaders & Sexware

GAME COMPENDIUMS

- CLASSIC GAMES Space Invaders, Pacman, Pacgirl, Ribit, Bricks, Donkey Kong, Q-Bert, Jumping Joe
- FUN AND GAMES Pango, Bouncing Babies, Elevator, Centipede, Pyramid, Dragons, Pac, Osbit
- MAZING GAMES Treasure Hunt, Amaze, Polymaze, Castle, 3-Demon, Fire, Chase
- LOST VEGAS One Arm Bandit, Roulette, Backgammon, Biorhythm, Keno and Casino featuring 4 more games
- SKILL & STRATEGY Frigate (Ships) Big Rig (Trucking simulation), Stock Exchange Game, Air Traffic Control
- COME IN PEACE Striker, Paratrooper, Round 42, Sopwith, Dragonfly, Landmine
- STAR WARRIORS Emergency Mission, Quantoid, Kamakaze, Rescue, Rockets, Spacewar
- PC CHALLENGE Chess, Othello, Entrap, Hexplode, Kalah
- JUNIOR CHALLENGE 3D TicTacTo, Dotto, Draughts, Mastermind, Brainstorm, Gomoku and Four-In-A-Row
- MONOGAMES 18 games for Mono/Hercules PC's. 2 DISCS
- KEEP THEM AMUSED Burger Blaster, Grime, Racer, Ninja, Caverns, Galaxy
- WIT YOUR PITS Battleships, Five-In-A-Line, Stock Game, Sales Game, Rogue (Artificial Intelligence), Eliza
- FACE THE ACTION Batalia (2 player) Tank (1/2 Player), Moonbase, Blort II, Gemini (can play 2-computer game)
- BLOCK & TACKLE Nemon, Qix, Xonix, Blockade, Ski-ing, Mummies, Lazer, Beast, Tron
- BASIC AMUSEMENTS Over 60 games to amuse and teach
- BASIC programming techniques (2 DISCS)
- SPY CATCHER Master Spy, Raid Over Auschwitz, Hostages, Brimstone, Mad Scientist (Mad Scientist is for BASIC2)
- GOOD SPORTS PCTennis, Teed Off (Golf) Sailing (in the Bermuda Triangle), Armchair Quarterback (Football)
- SEEK & DESTROY Galactic Conquest, Daleks, Depthcharge, Lazy Monday, Intercept, Berzerk
- SPACED OUT Saucer, Crisis, Encounter, Xo and Space
- UP AND AT 'EM Flightmare, BitBat, Droids, Robotron, Spyder, Eggs, Stun
- PLAYTIME Lotto, Bingo, The Story of Eli, Motoman, Slug
- SPORTING LIFE PC-Golf, PC-Pool, PC-Bowl, Basketball
- ARCADIA Killer Bees, Mario Brothers, Snipe, Snakepit, Pearl, Wimps, RLogic
- WILLY AND HIS FRIENDS Willy the Worm, Willy II, Willy Designer, Doctor Sleep, Disk Crash, Labbits & Voldrons

ADVANTAGE (NCE) 56 BATH ROAD, CHELTENHAM, GL53 7HJ. TEL: 0242 224340

VISA

AMSTRAD PC 1512 double disk colour monitor II games, two joysticks, moderate condition, £175 o.n.o. Phone 960 4218 after 6 pm, not Wednesday.

PIONEER PX-7 MSX computer, with inbuilt Genlock. Ideal for video applications. Also Pioneer graphics tablet and pen. Data recorder, Titling software packages. All boxed and immaculate £225 (Derbyshire) 0773 749630.

FOR BBC Akhter disc drive 40/80 D/S 5.25" £40. Voltmale twin joysticks £10. Watford Solderless Sideways ROM socket board £20. Various other ROMs. Acorn teletext £20. Tel: 0778 422103.

AMSTRAD CPC 464 with colour monitor and 30 games, bargain at £150 o.n.o. or swap for midi keyboard. Tel: Aberdeen (0224) 276434. Ask for Alan.

MAGAZINES for sale, Your Spectrum issues 1 to 21, Your Sinclair issues 1 to 27, Popular Computing Today issues 1 to 39. Willing to split, any offers? Phone (0224) 276434.

PCW 8256 with memory upgrade. Protext WP also CP/M software included. Under six months old still under guarantee. PC Forces Sale. £375 o.n.o. For details Tel: Rochdale (0706) 344106.

ACORN 512K co-processor with adaptor to connect BBC B. DOS+ and GEM software. As new £120, much more Acorn hardware/Firmware. Tel: 0702 559005.

COLOUR TV 14" portable, suit computer or general use. Quality picture, only £55, buyer won't be disappointed. Ring 0928 567400. Ask for Bri, after 8 pm.

SINCLAIR QL for sale £50 inc 8 books, 10 carts, printer interface, all manuals, spare membrane. Ring Brian at 0928 567400, after 8 pm. (Runcorn).

AMSTRAD CPC128 colour monitor DMP128 printer, joystick, Mini Office II, Money Manager, Self Teach CP/M plus, £250 games, software + extras excellent condition + manuals. £370 o.n.o. Phone Mick (390) 5861.

CBM 64 with tape and disc drive + collection of quality games and some for sale at £245 plus joystick and disc box. Tel: 0782 415256, 6-7 pm buyer collects, cash only.

AMSTRAD PCW 8512, hardly used, boxed, as new, plus dot matrix printer, plus WP software, £400 o.n.o. Tel: 0274 626165, evenings.

CASIO HT-700 programmable digital synthesizer midi in out LG. Keyboard, 40 rhythms, pitch bend take RAM cards, £130 still boxed. Tel: 0924 493633, West Yorkshire.

COMMODORE 64/128 computer modem, still boxed, £25. Some original software, £2 each. Tel: 0924 493633.

DRAGON 059 originals £20 each. Other original software £3 each, American and British mags, £20 the lot, about 100. Tel: 0924 493633.

XL system 800XL with full set of brand new ram chips, 1010, XC12, Quickshot II Joystick, over £200 of software, all manuals partly boxed perfect condition, will deliver, £80 o.n.o. Tel: 0295 738738.

130XE, XC12, XF551, 850 interface, printer cable, trackball, proline joystick Quickshot II turbo joy, speaker system video cable, £600 of disk software and cartridges such as S.A.M. Brand New all boxed manuals, perfect condition, plus all mags, books and a years subscription to Atari Explorer in the U.S.A. Will deliver, £380 o.n.o. Tel: 0295 738738.

AMSTRAD 464 colour monitor, disk drive, Multiface 2, £250 of games, AA mags, 1 to 49, £425 or closest offer. Contact Ian after 6pm Tel: 0428 4840. 464 keyboard and modulator for £50.

800XL disc drive, data recorder approx 70 games, mags, books, £120 o.n.o. Tel: 0704 89411, after 6.00, Lancs.

AMIGA A500, including loads software, samplers, mouse mat, joystick, coder, boxed as new. Tel: 0923 670810, after 6 pm. Offers only (Watford Area).

ATARI ST, 1 Meg external drive, 1 Meg memory, Discovery Happy cartridge, 100+ discs. All manuals, joystick etc, £500. Call Alan on 0932 564552, after 6 pm.

AMSTRAD PCW 8512, unmarked condition, complete with software and Basic manual £275. Tel: 0268 697764 after 7 pm.

AMSTRAD PC2086, 32 Mb hard disk (Seagate) 14" colour VGA, some software, perfect condition, still boxed, £900 o.n.o. Tel: 0623 552942 and leave your name and number.

ATARI 1040 STF, SM124 monitor, Steinberg PRO24 V.3 plus lots of software, joystick, disk box. As new condition, £595. Tel: 0533 849368.

1029 Atari Dot-Matrix printer, boxed as new. Atari Writer Word Proc Included. Excellent condition. Sell for £70 - offers considered. Phone (0248) 722960 After 6.30pm.

MOUSE PCW 8512 for sale Plus lots of 3" discs. D.T.P screen filter for PCW offers complete Darkroom swap for Amiga ring Neil 01 377 2638 A.6%

DATEL Genie mouse, plus (Interface for Spectrum) boxed as new plus Icon Graphics 128, Artist II, White Lighting, G.A.C Paint Plus, all Originals with documents the lot £50. 041 881 5429.

AMIGA software. Tetris, Wizball, Nebulus, Mercenary, Kings Quest 3, Helter Skelter, Gnome Ranger, Bionic Commando, Black Shadow, £6 Each. £45 the lot. 0353 661080.

SEIKOSHA GP700 Colour Printer and Colour Graphics Interface new and boxed £180 call Andy 437 0434 Ext. 2255 between 9.30 - 5.30.

AMIGA original games: Falcon, Operation Wolf, Strike Force Harrier, Fish! Elite, Rocket Ranger, Sword of Sodan. All Excellent condition will sell separately. Open to offers phone Richard 0245 41 4231.

ELECTRON games! 28 games, 4 Educational Programs including Spycat, Last Ninja, Bugeyes, Computer Hits 2, a total of 41 programs, worth over £100. £30 the lot! Phone evenings 021-3506635.

OLIVETTI M240, Green CGA Monitor, 20Mb hard disk, 360k floppy, 640k memory, as new with DBase3+, Ability, Wordstar, Norton, Lotus 123, Games etc on HD, £895 O.N.O tel (Evenings) 0763 249823.

MUSICIAN on Amiga and ST will write your music for your games or demos all I want is a good music routine written on the ST. Ring Justin 0244 - 318122.

AMIGA games 3D Pool, Rick Dangerous, Robocop more available. All Original latest titles only £10 each ring Phil 051 342 3226 after 6pm.

OLIVETTI prodest PC 1 single drive mono VGC 9 months old includes D/Base WP S/Sheet Comms games Pascal £575 Also Sega Master System 3D Glasses £120. 01 519 5916.

QL with 3.5" Disk Drive, Colour monitor, Centronics Interface, Books, Roms, Software, £350 O.N.O TEL Guisley 0943 - 74651.

SPECTRUM +2 joystick PSU and 25 games on tape for £50 call Terry, 01 251 3769 after 5pm.

AMSTRAD 16405D Hi-Res enhanced colour (EGA) Western Digital 32 MB Hard Disk Drive, Maths Co-Processor £695. Epson DX100 Daisy Wheel Printer £60, Both good condition. Newport Gwent (0633) 25543.

FOR sale D100 P.L.C. programmable Logic Controller and L.C. Programmer 20/1/0 Unit Brand New + Ladder program for IBM PC/XT/AT Compatibles computers cost new £700 + sell £300 Details 061-633-0824.

AMIGA software. Gold Hints, Capt Blood, Corruption, Deja Vu, Guild of Thieves, Red October, Jinxter, Knight Orc, Mind Fighter, Pawn, Portal, Station Fall, £7 each. £70 the lot. 0353 661080.

P.C. Engine games to swap, I have "Overhauled Man" and "War of the Dead" what have you got phone (0306) 885 003 swaps only.

SEGA games console, 10 games, light Phaser, 2 Joypads, 1 joystick. Games inc Double Dragon, Shinobi, Afterburner. All boxed only £140 tel Chris 0772 717607 after 5pm.

FOR sale: Quattro Modem external no software instructions hence £450 O.N.O virtually new. IBM Dos 4.00 (3.5 Diskettes) shrink wrapped still £50 ONO. Call Raj on 01 571 2867 after 7pm.

QL(JS) 640K. 2x720K 5.25" Epson DD/DS disk Drives. Internal QIMI Mouse. SER/PAR Converter. Spare PSU. Software, Psion V2.35, Qram, QPointer, 20xMDVs 30 Disks. User/Tech guides. Perfect. £300. Tel: 01-889 - 4276 Tottenham.

XEROX 4020 Colour Inkjet with extra paper, Ink. Amazing results from the best Amiga Printer £725 O.N.O also Digi View System £260 call 0787 74860 after 5pm for details.

AMIGA Originals World Tour Golf, Capone, 3 Stooges, Interceptor, Strike Force Harrier, Hostages, Mortville Manor, Defender of The Crown. A Bargain at £40 the lot. Tel Ian on Bristol 613173.

COMMODORE Plus/4 Data Recorder Tapes. Electron many titles. T1-99/4A offers all or parts manuals for Plus/4 and Electron included phone 0942 813795 (Lancs).

SEGA in excellent condition with 27 games eg. Altered Beast, Rastan, Vigilante, Rampage, Time Soldiers, R-Type, with control pads and Konix joystick sell for £200 phone (0254) 53195 After 6pm.

GLP D/Matrix S/P Printer Tractor C/Roll units. Best offer secures. Buyer collects, pays car.. Also Spectrum Kempstone I/Face B.O.S. TEL George 0322 69897.

AMSTRAD CPC 464 with Green Monitors, Perfect condition, boxed, with manual, books, games, Mini Office 2, (seldom used), Guaranteed, £130 inc. postage/insurance. Stuart Miller, 53 Albert Street, Edinburgh.

AMSTRAD CPC6128 with Colour Monitor, Joystick, Speech ROM, Tape Recorder, Dust Covers, Blank Discs, Discs Box, Manuals and Software £230, Ring Andy for details 04022 23092.

OKI Micro Line 192 Printer for sale good condition, fast quality printer with multi Fonts cost £395 quick sale £150. Ideal for small business and word processing. Phone 01 788 3708.

CBM64 for sale, joysticks hardly used for £160, Sega Master System with 2 games control pads for £65 Together £220 or will swap for Amiga A500 phone 0633 894 673 after 5pm.

C64 original disk Super Star Ice Hockey with instructions by Mindscape only £4.50. Jack Diamond. 18 Walker Road, Ayr, Ayrshire, Scotland. KA8 9LB.

AMIGA 500+ External Drive + Modulator, + 2 joysticks, 160+ disks of software, disk boxes, mags, mouse mat, boxed as new, mint condition, valued at £3500+, offers £390 +, Tel: 0273 502281, 6pm - 10pm.

240V to 110V voltage converter suitable for computer equipment, 1000W for sale, £50 O.N.O, also 240V mains conditioner unit, £50 O.N.O Tel (0733) 73168 Evenings.

BROTHER M-1009 Pin Dot Matrix Printer Pin Feed Unit £55 O.N.O Phone Exeter 58813 after 8pm.

SWAP over 100 31/2" disks most with Amiga PD for best C64 or CR8 Deal offered Tel: Lee (0778) 347616.

SWAP NEC Amiga second Drive for best C64 or C128 deal offered Tel: Lee (0778) 347616.

SPECTRUM 128 + 3 + 10 discs + Multiface 3 £150. Phone 0253 886601 Blackpool Area.

SPECTRUM + , Power Pack, joystick, Interface and loadsa games, mint condition, business software, Word Processor, etc. £100 ideal Xmas gift. Write to S. Shaw, 50 Tarnbrook Drive, Blackpool, Lancs, FY3 7QA.

AMIGA 500 for sale three weeks old, II months guarantee, mod; Comp Pro joystick 14 games inc. Beast, Great Saving on new price £330. Tel: Cardiff 0222 551418.

SPEC 128 + over £600 of games, very good condition. Games all originals. I'm open to offers. Phone 664085, ask for Marcus between 4 & 6 most days.

CASIO C2 101 Synth with case, Stand, Two RAM Packs, PSU, Midi leads and super conductor ST software £170 ONO buy it now! Ring Dave Leeds 691 532.

COMMODORE 64 and Datasette. Over £300 of software and utilities all original and boxed in excellent condition. £150 ONO Tel Blackpool 0253 64386 Preferably after 6pm.

ATARI 520 STFM with over £300 of games ie. Robocop, Dungeon Master and Casio HT700 Digitizer MIDI keyboard, all for only £360 O.N.O Tel Leeds (0532) 736942.

ATARI STFM 10 months old, one Mega Drive, some software, mint condition £270 phone 0908 377029 Evenings or weekend Bucks.

BBC Master 512 Dos+/Gem 51/4 " , 31/2" Drives, Colour Monitor, AMX Mouse, Stop

Press, Extra Extra, Morley Romboard Beebug, Master Rom, Double Console, Typing, Joystick, Manuals, Games, etc, 1 year old as new £725 ono. Phil 0980 6103030 evenings/weekends.

AMIGA software boxed as original, Power Drome, War in Middle Earth, Def Con 5, Chuckie Egg, Speedball, Thunder Blade, £7.00 Each or £35 the lot, buyer collects. Tel Bob 01-949-0240 New Malden Surrey.

ATARI STFM 1/2 meg Drive with original software and free disks. Can deliver Scotland. £200 phone 0250 5108.

COMMODORE 64 Cassette Unit Leads etc, Manuals, Joystick, Music, Keyboard, overlay with Music Master Program, 40+ Computer mags, over £250 worth of games will accept £195. Phone Junior on (01) 749-5698.

ATARI 520STFM Explorer pack, 1 meg Drive, only £260 N.O. Tel (091) 5142927 (games included).

COLOUR Monitor Fidelity CM14 with Anti Glare Filter £100. Also Amstrad DMP 2000 Printer (Dot Matrix) with 8K Buffer Installed £100 Phone Bill (0265) 57100.

ART Studio by Rainbird for Spectrum boxed as new with Manuals only £4.50 best ever Speccy Art package. Tel 0305 783506. Ask for Ian.

ATARI 520 STFM Super Pack with Philips 8833 monitor plus Silica Starter pack as new, hardly used, original package available. Ideal Xmas gift, cost £630+ sell for £450. 0902 416561.

16 Spectrum games all for £30. Include Robocop, R-Type, Afterburner, Combat School plus many others. Sorry will not separate. Phone 685 0277 and ask for Wilton. Need PC engine contacts.

SPECTRUM + 48K tape recorder, over 80 games, joystick, printer, colour TV (needs repairing) - £95 buyer must collect Tel (0782) 515964.

FOR sale: Outrun Electronic game with steering wheel and gear stick, includes realistic sound effects and 5 exciting races. Cost £35, sell for £20 Exl cond. Tel (0782) 515964.

OCEANIC OC-118N disk-drive! Barely used, good looking reliable, quiet, (Forget that 1541 Racket!) only £70! One chance only! Call Chris (evenings) on (0274) 582716. Hurry before I sell it!!

CITIZEN 120D Printer! Only £50 without Interface £75 with CBM 64 Interface! (Will work with other Computers if relevant, Interface bought separately.) Superb condition! (Call Chris Evenings only (0274) 582716.

ATARI internal half meg drive and control board. Two months old. £20 only. Phone 05337 09314 evenings price includes postage. Hi! to Skexis and Grongo.

SPECTRUM + 2, mouse, joystick, over £500 games, loads of mags. V.g.c £200 ono. Tel: (0252) 725278 after 6pm.

AMIGA 68010 CPU for sale. Can't install in my machine as warranty will become invalid. £50 ono. Phone Paul on Bristol 652759 after 5pm weekdays only. Buyer collects.

ATARI STFM 1 meg internal drive for sale £60. Tel 0904 791067.

AMIGA 500. 10 months old, with £380 of software (not 10 star pack). 10 blank discs, dust cover, mouse mat, books, £395. Buyer collects or pays postage. Bargain 0353 661080.

ATARI 520STFM 1 meg ram 720K internal drive, software, books, mags. £350 ono. Phone (0226) 240790 evenings.

CPC 464 and colour monitor under guarantee with £100 of games. Exc. working order £230 ono. 0322 78239, Dartford.

SPECTRUM PLUS 3 for sale. Joystick adapters/interface, £30 of games and ten blank discs. In excellent condition, hardly used. Bargain at £150. Buyer collects. Phone Mike - 051-677 1581.

MPS 1200 printer, friction/tractor feed NLQ and draft, serial cable for 64/128 purchased in error. Brand new worth £200. £150 ono. Call 0795 426557 evening and weekends. Phil.

BARGAIN 64/128 Commodore 1541 d/drive + DOS cassette disks, manuals, loads of extras. Sale due to upgrade to Amiga only £280 buys the lot. tel: 061 688 4209 after 6pm. Manchester.

RARE, collectable, one Newbrain 32k computer, complete PSU's, leads, manual, software £50. One Aquarius, 16+16K computer, PSU, software manual, complete £50. + VIC20/ZX81 parts, ST books, various software. 0743 249194.

ATARI XF551 D/S 360K disk drive new, under warranty, boxed, little used, immaculate, with 3x boxes disks, manuals, cost (total) £190. Sell £95. (only five months old!) Phone 0743 249094.

AMSTRAD CPC464, colour monitor, games and software worth over £700. mags, joystick, inst. book, perfect condition. Bargain £240. Phone Luton 0582 410228 after 5pm.

AMIGA 500 1.3 rom 1.meg + clock. 1081 monitor + stand. Canon 1080A printer. All as new £650. Basingstoke 781408.

SEGA master system includes five top games and two control pads. All for £125. Tel: 0245 329600

AMIGA 500, external drive, CM8833 monitor, WP, database and spreadsheet software, plus games. excellent condition £500 the lot. No split. Phone Ian (0427) 880364.

FOR Seikosha GP-50S, 2 ribbons and 3 rolls of 5" paper. Brand new. Never been used due to printer breaking down. A tenner the lot. Phone Gary on (0604) 863191.

AMSTRAD CPC 464, monitor, over £300 worth of software, drum machine and kits all worth over £600, will sell the lot for £160. Tel: 0245 329600.

LEAD GUITAR: 'Axe' and fender amp complete cost £200 but sell for £100 ono. Need money for an ST or swap for broken or dead ST all VGC. Tel Loughborough 267926.

SEGA games in excellent condition for sale. Cartridges: Outrun, Rambo 3, Soccer, Rocky, Tennis, Great Football, Wrestling, Volleyball, Marksman Shooting, Hang-On/Astro W. Each game £8 - £15 inc. P&P. Phone Jonathan 0592 200889.

YAMAHA PSS 470 Keyboard 21 voices, 12 rhythms, digital synth, custom drummer 49 keys, stereo sound auto bass £80 also Casio DK1 sampling, keyboard. £35 phone 041 551 0320 evenings.

1541 DISK DRIVE 25 games util. disks plus disk mags. and 40 blank disks and Action Replay cart. £130 phone 041 551 0320 evenings after 7.

SANYO Colour Video Camera, 200m Macro Focus Elect. Viewfinder. £200. Also ORIC 48k 33 Games joystick interface. Books £50 phone 041 551 0320 evenings after 7.

COMMODORE 64, printer, 5 1/4" disk drive, tape deck, cartridges sound sampler, extensive software collection on disk and tape manuals, books, and mags all for £400 ono. Contact Wayne 0484 657239.

COMMODORE 64/128 computer plus 1541 disc drive and, data recorder. Software & cartridges with box and manuals £190 ono 0689 50752.

ATARI 520STFM, 2 yrs old excellent condition over £600 worth of games, all original, plus multiface and joystick. Only £350 ono. Phone Swindon (0793) 881198.

ATARI 520 STFM with 1 meg drive plus software for sale inc. Elite and Dungeon Master £350 or nearest offer. Call Phil on 051 339 7630 after 7pm.

PRINTER. DMP 2000 Dot Matrix. Epson Compatible with additional buffer chip. £85 plus postage. Fred Ball. 292 Bispham Road, Bispham, Blackpool FY2 OH2. Tel 0253 593530.

SPECTRUM +3 computer with control joystick and multiface 3 unit, games included. VGC £195 ono. Tel Swindon (0793) 826386.

OLIVETTI PC1 still under guarantee. With Lotus 1-2-3, Word Perfect 5, Wordstar, etc £550 or exch Amstrad PCW512. Twickenham, Alex Anderson 01 892 1336.

AMIGA A500 512k memory expansion board with clock as per A501. Brand new £80 ono. Tel Nigel 0923 777056.

APRICOT Xi 10mb and single floppy with spreadsheet, Basic, w/p and diary. All manuals available. Will demonstrate. £325. 0378 73555.

BBC MASTER plus double sided disc drive and discs £300. Electron plus tapes £50. Buyer to collect. Phone 01 444 0709 after 8pm (Muswell Hill).

QL. Trump Card. Twin Nec. discs. Modem, books, lots of software. Green monitor and more. Offer. Tel 0495 790716 ask for Martin.

BBC B 2 disk drives, 40 TR + dual 80 Z80 second processor + software, modem Wordwise, DiscDoc ROM, replay ROM, ROM/RAM board, loads of software £450. Tel: John after 8 pm: 0522 693836.

AMSTRAD CPC 464 with green monitor (new condition, boxed), many games, Mini Office 2, books. Complete package, £130 inc. postage/insurance. Genuine bargain. Contact: Stuart Miller, 53 Albert St, Edinburgh.

BBC B computer, complete with tape machine, manuals, joystick and tapes. The lot £250, perfect working order and condition, bargain. Contact: Miss King, 22 Geranium Walk, Colchester, Essex. Tel: 8971013.

SHARP IQ, the ultimate personal organiser, as new £140 o.n.o. Tel: 0993 843729, (Oxfordshire).

ST Flight Simulator II, as new £15. Also WANTED, Protext Filer and Office. Would swap Filer and Office for Flight Simulator II. Tel: 0734 6979 095.

SPECTRUM +3 disk drive computer complete with software. 18 months old, ideal first machine, £130 o.n.o. Tel: 0634 361465.

ST software, Populous, Battletech, Middle Earth, Bloodwych, Sleeping Gods, Demons Winter, Chrono Quest, Battle Chess, £9.00 each (plus more titles), Half Meg internal £20. Multiface ST V2-0 £25. Tel: 01-876 5407 after 8 pm.

ST software: dB Man £39, Haba Writer + Habaspell £24, Psion Chess, Scrabble De Luxe and Elite £8 each, Artscribe and Mdisk + £4 each. Tel: Bristol 741421, evenings.

ST monochrome monitor £60, Stand £5, Mouse £12, Microstuffer Clock Card £12, Computer Concepts back pack cartridge £12. Tel: Bristol 741421, evenings.

AMSTRAD CPC 464 with joystick, games (needs monitor or modulator) £80, Computer Express mags (issues 11 - 30) £7, Amiga Flight Sim. II £12, Daley Thompson £7. Tel: 01-648 8317.

C64 good condition, C2N cassette 1541 disk drive, modem, final cartridge, all cables, manuals, tapes, disks, £150. Tel: 061 962 2808.

AMSTRAD 6125 computer, green screen, TV modulator, mouse, games, disk, tape etc, still boxed and guaranteed. Worth over £800, only £500. Tel: 0920 467982.

AMSTRAD PPC 640D, dual drives, 2400 modem, as new £475. Also Philips CM8833 monitor again as new £150. Tel: John 0225 769945.

SEIKOSHA GP250X printer for sale, used once only, excellent condition but listing quality only, inc parallel cable, £100 o.n.o. Offers to Julian. 236 Glynswood, Chard, Somerset, TA20 1BG.

QUICK sale! PC Engine (PAL) and five games, £155. Also Sega, light phaser and nine games, £65. Will post. Phone Cardiff (0222) 487794 and ask for Ahmed. P.S hurry up!!!!!

AMIGA A500, as new with joystick, stereo speakers, £200, top software and Philips colour monitor, £430. Tel: 0630 57129 or sell Amiga only £320.

ATARI ST520FM, 1 Meg drive, board upgrade, lots of software, joysticks, prosound sampler, worth £800, bargain, £380, mint condition. Tel: 0778 341306, after 6.00 pm.

SEGA Master system for sale, incl. 9 top games, such as After Burner, Space Harrier etc. Still in box with 2 joypads, a bargain at £100. Tel: 0707 57646 and ask for Nick.

ALPHACOM 32 printer, one spare roll of paper, £25. Shrewsbury (0743) 59356 after 6 pm please.

SPECTRUM 128, printer, cassette recorder, RAM music machine, £300 software. Joystick interface, books, £150. No offers. Won't split. Tel: 0603 400921.

JUKI 6200 high quality daisy wheel printer, very good condition with lead, plus parallel interface. New ribbon, £185 o.n.o. Tel: Andy after 5pm 051 526 6708.

BBC B with DFS, Wordwise WP, disk drive, data recorder, all manuals, tapes, disks, many games, £295 o.n.o. Commodore 4040 5.25 floppy disk drive, hardly used, £135 o.n.o. Tel: 051 526 6000.

AMSTRAD CPC 464, colour monitor, 200+ games worth over £400, joystick, manuals, will accept £200. Tel: 01 594 4468.

ATARI 520ST, 1 Meg memory, dual 1 Meg drives, SM125 monitor MCC Pascal 2, GFA, Basic books, games, blank disks, mags, mouse mat, dust cover etc. Tel: Steve (daytime) 0932 884457 (Weybridge).

ZX SPECTRUM PC games, case, tape recorder, joystick and users book. all excellent condition, £200 o.n.o. Tel: David Brown 01 723 0352, day or night.

PROGRAMMABLE Logic Controller for sale 10 I/O unit D100 P.L.C + Programmer Liquid Crystal display screen for ladder circuits. Also IBM PC/XT/AT software program for the P.L.C. All for £250 o.n.o. Tel: 061 6330824.

BBC B 32K solidisk, sideways RAM 40/80T D.D. Discs Eprom Blower and eraser, various books 140H 16K and 70H 8K Eproms - 16 programmed, offers Tel: 0422 844122, evenings.

Special Reserve

Can you afford not to join?

- Bi-monthly ***Buyer's Guide*** each with details of 40 games.
- Membership card, Release Schedule and a folder for the Buyer's Guides.
- ***24-hour despatch*** of stock items. Most lines in stock.
- Games sent individually by ***1st class post.*** Most fit through your letter-box.
- ***7-day hotline***, until 8pm weekdays, 10 to 5.30 Saturdays, 11 to 5 Sundays.
- ***Written notification*** of delays and instant refunds on request.
- ***No commitment***, no obligation to buy anything and no "minimum purchase".
- ***The best games, carefully selected, available at extraordinary prices.***

All for just **£5.00**

We're miles cheaper than elsewhere. Below are a selection of offers at prices you might not believe. You can buy games at the same time as joining - or join now and select from our full catalogue. All items advertised are only for sale to members and are subject to availability.
Note: Upgrade to Official Secrets is offered to members of Special Reserve

For the serious gamer!

Official Secrets

Members of Official Secrets get all the benefits of Special Reserve **plus:**

- ***Confidential.*** Our 32 page bi-monthly magazine is essential reading for those interested in adventures or role playing games. Written by experts, *Confidential* has covered everything from How to Host a Murder to Which F16 Flight Simulator? Our agents, led by the Master Spy known as "The Boss Upstairs", seek out the secrets of RPG's, FRP's, MUG's, PBM's, Leisure Suit Larry, The Russians, Elvira.....
- ***Myth.*** Written by Magnetic Scrolls, authors of The Pawn, exclusively for members of Official Secrets. Myth is a small adventure set in Ancient Greece. In it you'll meet The Ferryman, cheat Death and face the nine-headed Hydra. Myth includes the famous Magnetic Scrolls parser and graphics and is included in the price of membership.
- ***Help-Line.*** Manned weekdays until 8pm and Sundays. The Help-Line can help you solve most problems on most adventures.
- ***Gnome Ranger.*** Level 9's brilliant 3-part adventure or a ***Surprise Alternative.***

Annual UK Membership costs **£22.00**, including six issues of Confidential, Myth, the Help-Line, Gnome Ranger and membership of Special Reserve.

Myth Quotes

"An excellent adventure... witty, cunning and just plain good fun! If you liked Fish! you'll probably like this, because they're very similar in style: you may even prefer Myth, it's that good!"

Amiga Format

"Myth is destined to become a classic."

Crash Magazine ***SMASH 91%***

Myth Reviews

Commodore User 90%, Amiga Format 87%, TGM 85%

16 Bit Software

	AMIGA	ST	IBM
ALTERED BEAST	15.99	12.99	
AMERICAN ICE HOCKEY	15.99	15.99	16.99
AQUAVENTURA	19.99	19.99	
ARTHUR (INFOCOM)	16.49		19.99
BAAL	6.99	6.99	14.99
BALANCE OF POWER 1990	15.99	15.99	18.99
BALLISTIX	6.99	6.99	15.49
BANGKOK KNIGHTS	15.99	13.49	
BARBARIAN 2 (PALACE)	18.49	15.49	18.99
BARBARIAN 2 (PSYGNOSIS)	14.99	14.99	
BATMAN CAPED CRUSADER	15.49	12.99	13.99
BATMAN THE MOVIE	15.99	15.99	
BATTLE SQUADRON	15.99		
BATTLECHESS	10.99	16.49	17.49
BATTLETECH (INFOCOM)	16.49	16.49	17.49
BEACH VOLLEY	15.99	12.99	
BLADE WARRIOR	15.99	15.99	16.99
BLOOD MONEY	14.49	14.49	15.49
BLOODWYCH	15.49	15.49	16.49
BLOODWYCH DATA DISK	9.99	9.99	
BOMBER	18.49	18.49	21.49
CABAL	15.49	13.49	
CARTHAGE	15.49	15.49	
CASTLE WARRIOR	15.49	12.99	
CHAMBERS OF SHAOLIN	14.99	12.49	
CHAMPIONSHIP BASEBALL	9.99	6.49	4.99
CHAMPIONSHIP BASKETBALL	5.99	9.99	
CHAMP FOOTBALL (USA)	4.99	4.99	5.99
CHAOS STRIKES BACK	12.49		

SONY 3.5" DS/DD DISK 79p

CHASE H.Q	15.99	12.99	
CHESSMASTER 2000	16.49	16.49	16.49
CHRONO QUEST	9.49	9.49	
COLLOSUS CHESS X	15.49	15.49	
CONFLICT EUROPE	16.49	16.49	17.49
CONTINENTAL CIRCUS	12.99	12.99	
CORRUPTION (M/SCROLLS)	13.99	13.99	15.99
DAMOCLES	15.49	15.49	
DEFENDER OF THE CROWN	8.49	8.49	
DEJA VU	12.49	5.99	
DEJA VU 2	15.99	15.99	16.49
DELUXE PAINT III	51.49		
DEMONS TOMB	12.99	12.99	16.49
DRAGON SPIRIT	12.99	12.99	16.99
DRAGON'S LAIR (1 MEG)	28.49		
DRAGONS OF FLAME (SSI)	17.49	17.49	18.49
DRAKKHEN	16.99	16.99	17.99
DUNGEON MASTER	15.49	15.49	18.99
DUNGEON MASTER EDITOR	7.49	7.49	
DYNAMITE DUX	15.99	13.49	
ELIMINATOR	5.99	5.99	
ELITE	13.49	15.49	16.49
EMPEROR OF THE MINES	15.49	15.49	
EYE OF HORUS	15.99	15.99	18.99
F16 COMBAT PILOT	15.99	15.99	
F16 FALCON	18.49	15.49	14.99
F16 FALCON MISSION DISK	9.99	9.99	
F29 RETALIATOR	16.49	16.49	
FED OF FREE TRADERS	19.49	19.49	
FERRARI FORMULA 1		16.49	16.49
FIENDISH FREDDIE'S BIG TOP	18.49	18.49	18.99
FIFTH GEAR	15.49	15.49	
FISH! (MAG SCROLLS)	13.99	13.99	15.99
FLASH DRAGON	12.49	12.49	
FLYING SHARK	6.99		
FOOTBALL MANAGER 2	8.49	8.49	8.49
FM 2 EXPANSION KIT	5.99	6.49	6.49
FUTURE WARS	16.49	16.49	
GAUNTLET 2	16.49	13.49	
GHOSTBUSTERS 2	16.49	16.49	19.49
GRIDIRON (U.S FOOTBALL)	14.99	14.99	
GUNSHIP	15.99	15.49	23.47
HARD DRIVIN'	12.99	12.99	
HELLFIRE ATTACK	3.49	3.49	
HEWSON PREMIER VOL1	16.99	16.99	
HEWSON PREMIER VOL2	17.49	17.49	
HILLSFAR (SSI)	17.49	17.49	18.49
HIT DISKS VOLUME 2	9.49	9.49	
HITCH HIKERS GUIDE	9.99		
HONDA RVF 750	15.49	15.49	
HOSTAGES	8.49	8.49	9.49
HOUND OF SHADOW	16.99	16.99	17.49
HYBRIS	8.49		
INDIANA JONES (ACTION)	11.99	11.99	16.49
INDIANA JONES (ADV)	16.99	14.99	20.49
INFESTATION	14.99	14.99	
INTERPHASE	15.99	15.99	
IRON LORD	16.49	16.49	17.49
JACK NICKLAU'S GOLF	15.99		17.49
JINXTER (MAG SCROLLS)	13.99	13.99	15.99
JOURNEY (INFOCOM)	19.49		19.99
JUG	11.99	11.99	
KICK OFF	11.99	11.99	16.49
KICK OFF EXPANSION DISK	7.49	7.49	
KILLING GAME SHOW	12.49	12.49	
KIND WORDS 2.0 (W/P)	33.49		
KING OF CHICAGO	8.49		7.49
KINGS QUEST 1, 2 & 3	21.49	22.49	23.49
KINGS QUEST 4 (SIERRA)	21.49		12.99
KNIGHT ORC (LEVEL 9)	6.49		7.99
KNIGHTFORCE	14.99	14.99	15.99
KRISTAL	9.99	17.49	
KULT	8.49	8.49	9.49
LEATHER GODDESSES (INFOCOM)	9.99		9.99
LEATHERNECKS	6.49	6.49	
LEGEND OF THE SWORD	5.99		13.49
LEISURE SUIT LARRY 2	18.99	18.99	22.49
LEONARDO	11.99	11.99	
LIGHT FORCE (COMP)	15.99	15.99	
LIVERPOOL	11.99	11.99	15.49
LOMBARD RAC RALLY	14.99	14.99	15.99
LORDS OF THE RISING SUN	18.49		
MENACE	6.99	6.99	14.99
MICROPROSE SOCCER	15.99	15.99	9.99
MILENNIUM 2.2	15.99	15.99	16.99
MR HELI	15.99	15.99	
NEBULUS	5.99	5.99	
NEUROMANCER	16.99		
NEVER MIND	12.49	12.49	15.49
NIGEL MANSELL'S G/PRIX	4.99	4.99	
OPERATION WOLF	15.99	12.99	
PACLAND	7.49	11.99	
PACMANIA	7.99	5.99	
PAPERBOY	12.99	12.99	16.99
PAWN (MAG SCROLLS)	13.99	13.99	15.99
PERSONAL NIGHTMARE	18.99	18.99	20.99
PHOTON PAINT	10.99		
PLAYER MANAGER	12.99	12.99	
POLICE QUEST 1 (SIERRA)	15.99	15.99	16.99
POLICE QUEST 2 (SIERRA)	16.49		19.99
POPULOUS	16.49	16.49	17.49
POPULOUS PROMISED LANDS	7.99	7.99	7.99
POWER DRIFT	15.99	13.49	
POWERDROME	16.49		
PRECIOUS METAL	15.49	15.49	
PREDATOR	15.99		
PROTEXT W/PROCESSOR	64.99	47.99	
PUBLISHERS CHOICE 1 MEG	66.49		
PURPLE SATURN DAY	7.49	8.49	9.49
QUARTERBACK	12.99	12.99	16.49
R-TYPE	11.49	6.99	
RALLY CROSS CHALLENGE	12.99	12.99	16.49
REAL GHOSTBUSTERS	8.49	7.49	
RED LIGHTNING (SSI)	19.99	19.99	21.49
RED STORM RISING	16.49		11.99
RICK DANGEROUS	15.49	15.49	9.99
ROBOCOP	15.49	12.99	13.99
ROCKET RANGER	9.99	15.49	
SCAPEGHOST (LEVEL 9)	12.49	12.49	12.99
SCRABBLE DE LUXE	12.99		16.49
SHADOW OF THE BEAST	19.99	19.99	
SHADOWGATE	11.49	7.49	
SHINOBI	12.99	12.99	16.49
SHOGUN (INFOCOM)	9.99		19.99
SHOOT 'EM-UP CONSTR KIT	18.49	18.49	
SILKWORM	12.99	12.99	
SIM CITY	17.49		18.49
SPACE ACE	27.49	27.49	
SPACE QUEST 3 (SIERRA)	19.49		11.49
SPEEDBALL	15.49	15.49	5.99
SPHERICAL	12.99	12.99	13.49
STAR WARS TRILOGY	15.99	15.99	
STARGLIDER	6.49	6.49	
STARGLIDER 2	13.99	15.49	22.49
STATIONFALL (INFOCOM)	9.99		9.99
STEVE DAVIS SNOOKER	12.49	12.49	
STORMLORD	15.49	15.49	
STRIDER	13.49	13.49	
STRIKE FORCE HARRIER	5.49	5.49	6.99
STRYX	12.49	12.49	
STUNT CAR RACER	15.99	15.99	16.49
SUPER HANG ON		8.49	
SUPER WONDERBOY	15.99	12.99	
SWORD OF SODAN	13.99		
TEENAGE QUEEN	8.49	8.49	9.49
TESTDRIVE		8.49	9.99
TETRIS	4.49	6.49	
THE NEW ZEALAND STORY	15.99	12.99	
THE STORY SO FAR VOL. 3	12.99	12.99	
THREE STOOGES	6.99		7.49
THUNDERBIRDS	8.49	8.49	
TIME BANDIT	6.49	6.49	
TIMES OF LORE	16.49		9.99
TRIAD VOL. 1 (COMPILATION)	9.49	9.49	
TRIAD VOL. 2 (COMPILATION)	14.99	14.99	
TV SPORTS FOOTBALL (USA)	13.49	15.49	
ULTIMA IV	16.49		17.49
UNINVITED	12.49	5.99	
UNTOUCHABLES	15.99	12.99	
VETTE (CORVETTE)	18.49		18.99
VIRUS	12.49	6.99	16.99
VIXEN	4.49	4.49	4.49
WAR IN MIDDLE EARTH	15.49	15.49	16.49
WATERLOO	15.99	15.99	16.99
WAYNE GRETZKY HOCKEY	15.99	15.99	
WHO FR ROGER RABBIT	9.49		9.99
XENOMORPH	15.49	15.49	
XENON II, MEGABLAST	15.49	15.49	16.49
XENOPHOBE	15.99	15.99	16.49
ZORK ZERO (INFOCOM)	19.49		19.99

To order please write, or complete the coupon, or telephone us on **0279 600204.** Please note that there is a surcharge of 50p per game for orders placed by telephone.

Order Form

Non-members please add the membership fee

Name _____

Address _____

_____

Post Code _____ Phone No. _____

Computer _____ *5.25"/*3.5"/*3.0"/*TAPE

Payable to: Special Reserve or Official Secrets

P.O. Box 847, Harlow, CM21 9PH

Special Reserve and Official Secrets are trading names of Inter-Mediates Ltd.
Reg. Office: 2 South Block, The Maltings, Sawbridgeworth, Herts CM21 9PG.
Registered in England Number 2054713. VAT reg. no. 424 8532 51

Special Reserve membership £5 UK, £6 EEC or £7 World £ _____

or

Official Secrets membership £22 UK, £25 EEC or £30 World

with Gnome Ranger and Myth ☐ or with Surprise Alternative and Myth ☐

Item _____ NCE £ _____

Item _____ £ _____

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ **TOTAL** £ _____

Credit card expiry date _____

*CHEQUE/*POSTAL ORDER/*ACCESS/*VISA
(Including Connect, Mastercard and Eurocard)
* Delete where applicable

Overseas orders must be paid by credit card
Prices include UK Postage and Packing
EEC orders please add 70p per item
World orders please add £1.50 per item

ARCHIMEDES A440 plus fast 40Mb hard disk. Under warranty only £1950. Nec Multisync II £400. Computer concepts scan junior £110. ROM Podule £50. The lot, only £2200. Tel: 0532 842780.

AMIGA 500, 200 disks plus lots of books and magazines. Includes joystick, mouse and modulator. V.G.C £370 for the lot. Tel: 0533 775505. Ask for Steve.

AMSTRAD 464 colour monitor for perfect display £300 worth of software, joystick and manual worth £700 + sell for £365 o.n.o. Phone Carl (0952) 592407 after 5 pm.

SPECTRUM +3, as new, including multiface 3, 40+ games, and brand new Cheetah joystick - £195 o.n.o. Also complete set of 4 volumes - input mags - £35. Tel: (0527) 70407 (after 6) or (0543) 250505 (day).

ACORN Electron, disk drive, Plus One expansion unit, loads of extras, send for more details. S M Stocks, 56 Park St, Birdholme, Chesterfield, 540 24D.

SEGA Master system, nine games, light gun and Speed King joystick. Worth over £300, will sell for £160 o.n.o. Tel: 01 866 6855, after 4 pm and ask for Daniel.

STAR LC10 printer, under guarantee, £100. Tel: Lynn 01 440 0095, after 6 pm.

SPECTRUM +2 joystick, manuals, over £150 software amplifier plus 80 mags (Your Sinclair, Crash etc) £180 o.n.o. Buyer collects. Tel: Cambs (0223) 424182.

AMSTRAD CPC 6218 with colour monitor, joystick, games disk, also includes Micro File, Database and Microword Word Processor, £250 o.n.o. Tel: Paul on 0272 612631.

CASIO HT3000 full size synth, fully programmable midi-RAM card facility cover - price £190, no offers. Tel: 061 865 2597 for more info.

● HELP OFFERED

SPECTRUM +3 help offered FREE. Gary Stimson, 4 Fox Covert Drive, Roade, Northants, NN7 2LL. Don't forget the SAE!

C16/14 pokes 50 in all. When you order a poke you could win a FREE C16 game. Send SAE for latest details 90 Oakbank Fieldway, New Addington, Croydon, Surrey CR0 9EF

BUBBLE Bobble (Arcade) Tip. On title screen push joystick left then jump left, 1 player button, left, fire, then 1 player button, now put in cash for super power. (Jason's high score - 2 million).

AMIGA help offered. Workbench, CV or programming difficulties? However complex I'll try to assist. Jim Blacker, 17 Bellevue Terrace, Lancaster, LA1 4TY, or phone 0524 33553.

THE loft BBS 0442 230461 V21, V22, V22b, V23, 8NI, Protocols with new user advice files to download and online games for Atari and IBM - Call now: Hemel Hempstead 230461.

PSION datapaks formatted/Eproms erased if you don't have an eraser contact me as I might help, I have a Uvipac eraser S.A.E. Please sorry no phone-callers. Charles Trager, 7 Grantley Street, Glasgow Scotland, G41 3PT.

AMSTRAD CPC users. Help given with serious software: Protext, Stop Press, Tasword Suprcalc, BCPL, Pascal Basic etc. Mike Lyons, 21 Ashmore Street, Tyldsley, M29 8WW.

ATTENTION IBM Pascal programmers! If you have any problems with your programs or just want to say hello, write to: Sioe-Lin Kwik, Richmond College, Queensroad, Surrey, TW10 6JP.

SIRIUS users free newsletter available on request to: Sirius owners. Issue PO Box 222, Brighton, BN1 3BR.

MSX Knight Tyme need some help. Send S.A.E state what? E J Bowman, 5 The Street, Ovington, Thetford, Norfolk, IP25 6RX.

● OTHER

SWAP G.A.C. for Maxam II assembler or similar disc only CPC 464 expanded write 6 Frank Street, Great Horton, Bradford BDM 3BT. L .Williams.

AMIGA soundtracks written to order! Anything but acid! Conversions a speciality. All music issued as Doc-Tracker 2.1 modules. Interested, ring Southampton (0703) 766789 (Dave).

AMIGA contacts wanted to swap the latest stuff. Send lists and disks to: Mark 133 Andover Road, Bestwood, Nottingham, NG5 5FD.

TO Neville, thanks for the biggest wind up since The War Of The Worlds from a C128 owner in Devon.

● BULLETIN BOARDS

CALL Public House BBS today, on 0222 221168. 300/300 1200/1200 1200/75 2400/2400 supported. 7pm-9am weekdays and 24hrs w/end. Many files on-line for downloads and free membership.

SWA FAX 1 0622 850 440 BBS V23 24hrs totally free ! SY50p: Robert Izzard.

PEN PALS WANTED for C64 all letters answered so send your return letter to Les, 30 Gilmonby Road, Park End, Middlesbrough, Cleveland TS3 0AD. So send your letter.

MERLIN BBS V21 V22 V22BIS V23 down loads for Atari Amiga PL BBL Music 500 5000 Tell 0443 834 179 24 hr.
BB USERS, SYSOPS: I am in the process of setting my own BB up and want contacts. Write to Gary, The Cottage, Church Road, Fundenhall, Norwich, Norfolk NRI6 IEJ.

THE one to call, free for all. Bath BBS on-line 24 hours. Call now all speeds to 2400 Bath BBS 0225 83584I. The Best (ST Board) in the West. M. Burridge, 43 Midford Road, Combe Down, Bath BA2 5RW.

PHONE one of the best BBS's in the west! IBM PC, Atari ST, and UCSD P-system supported, Pecan BBS - Bristol (0272) 248076, 24 hrs, V21, V22 and V22BIS.

SAS BBS :(0742) 325232, V21/22/23/22BIS, 8N1, 24 hrs, ringback, on-line games, files, IBM helpline, Fnet, X-net, E-mail, F-mail. Send E-mail to BBS's World Wide. No fees! Fnet Node #1022.

PHANTOM viewdata BBS - 24 hrs. Tel: 0226 340425. Over one thousand pages on line - call today.

PC Forum Wildcat BBS. Tel: 0322 335348, World Wide Echo Mail, files, live games, also now read mail offline with QMX! Baud rates V21 V22 V23 BIS V23, call Tony today!

PUBLIC House BBS for the Amiga. Tel: Cardiff 0222 221168. All Bauds to 2400. Free membership, call 7pm-9am and 24hrs weekend. Many files on-line. C'mon give it a call today!

THE Gnome At Home BBS V23. 24hrs 01-888-8894. Free ST, Amiga, Commodore, Speccy, Beeb, Psion organiser, telesoftware. One of the most interesting viewdata systems in the UK!!!

WEST Coast BBS. Tel: 0752 670714. System Times 19.00 - 0600 hrs daily. PC + Enstein based, other areas being developed. All welcome, 300/300 12/75 8N1. Call today!

OLEF1 Your On-Line Electronic friend. A 24 hour BBS. It's FREE and all callers are welcome. Phone 01-882-9808.

CALL the brilliant Phantom Viewdata on (0226) 340425, V23v, 24 hours.

THE Loft BBS 0442 230461 Atari ST and IBM Downloads. Call now - Sysop Martin Carter.

WANTED: Bulletin Board software for the Amiga 500, basic set up, good money paid. If interested write to me at 18a Wyeverne Road, Cathays, Cardiff, CF2 4BH. P.D. Software also.

● GOODS WANTED

COMMS S/W. To enable CBM 64 modem to access BBS. Also will swap 1959 mini-minor for W.H.Y. Tel 0232 642687 after 6pm.

WANTED. Philips 8833 colour monitor, but anything considered, also Star LC10 colour printer. Tel 0224 704979.

WANTED 1 meg external disc drive for Atari ST including leads and PSU around £50 paid. Tel 0269 845 826 ask for Nial (S. Wales).

WANTED QL HARDWARE and software and IBM compatible computers and software. CPM computers also considered. Miralle WS3000 also wanted and any IBM specific-programming books wanted. Phone 07455 466.

● PENPALS

AMIGA contacts wanted to swap hints, tips etc. 101% guaranteed same day reply. I have an ever increasing amount of games etc. Contact: Finbarr Sheehan, 21 Loretto Park, Friars Walk, Cork 4, Ireland.

AMIGA contacts wanted. Must be fast and reliable. Write to: Steve, 12 Monet Court, Norwood, Waterford, Ireland. Disks 100% reply by return post.

AMIGA pals wanted, mainly in Telford area. Contact James at 46 Churncote, Stirchley, Telford, TF3 1YL.

AMIGA contacts wanted, must be fast and reliable. Write to me at: AXX, 38 Westacre Gardens, Yardley, Birmingham B33 8RE.

CPC owning penpals wanted for 16 year old. Interested in Basic, Pascal, (I'm a beginner), games, CPM+. Male or female, 15+ preferred. Details: Paul, 39 Guilton, Ash, Canterbury, Kent CT3 2HL.

AMIGA contacts wanted to swap latest software. Write or phone for details to: 1 Ahsmeads Way, Colehill, Wimbourne, Dorset or phone Mark on (0202) 884561.

ARCHIE PENPALS wanted to swap hints and tips especially graphic demos. 100% reply. Phone 01 904 9725 or write:- Alpesh, 13 West Close, Wembley Middlesex, HA9 9PJ after 5pm. Tar. HB'89.

AMIGA CONTACTS WANTED. 100% reply (and fast). Send discs + lists to: Richard 81, Monks Walk, buntingford, Herts. SG9 9DP. Also, any coders need a graphics artist? Contact me now!

HUMBLE AMIGA OWNER seeking contacts write to Dipesh, 83 Sunningdale Road, Luton, LU2 TTF.

● PERSONAL

MY DEAR ALI 'B' !! Thanks for buying the 'pooter' !!! Love you loads. From your dishwater wellie boots. (Hi to Chris 'M')

ITS my 21st Birthday on the 6th Oct wish me Happy Returns as no one else will, & EXPRESS is the BEST. Kev Newbold Kivo Park. Commodore User.

C-64 tape owner needs people to demos. Also Datasette for sale Give me £12.00 or exchange for a joystick in good condition.

● VIRUS WARNING

AMIGA USERS, watch out for the Sadaffi Virus, not seen by Virusx 3.2, look for name in block O. Author Eusn includes his phone number ! Don't know what it does.

AMIGA VIRUSES wanted for research. Send infected disks to:- Jonathan Ramsey, 'Kandy', Wycombe Road, Stokenchurch, Bucks. HP14 3RR.

● GOODS WANTED

WANTED Interpod or Brainbox for C64, may consider circuit details. Will swap games or utilities or pay cash. Phone Rod 0847 86310 after 6pm.

520 STFM (D/S drive) and printer to suit wanted. Not interested in software. Ring now cash waiting. Will consider either item separately. Nigel Bradford 0274 565070.

24 pin printer wanted, also CP/M PC, QL software. Phone 0232 651337. CP/M PC on QL with emulators. Beginner needs help. Phone John 0232 651337.

WANTED Atari ST, will pay around £140. Will collect London area. Software if possible. Phone 669 7237 (010 and ask for Peter Jnr.)

ATARI ST cricket games, swop for my games. Gavin, 12 Leven Grove, Preston Road, Hull, HU9 3QD. 0482 707944.

MODEM wanted. Upgrading from VTX5000, so must be faster. Must include software for Spectrum 128+2. Phone (0946) 693352. Mon-Sat 9am.-5pm.

CAN anyone help? I need an operator's manual for an IBM Pro Printer X24. Will pay for a copy. Please can some on help. Call Adrian: Basingstoke 862735.

WANTED for Apricot F2. Systems Discs and manuals, also information on built-in Modem, also technical ref. manuals. Please phone (0268) 697764 after 7. (Essex).

HELP! Want manual for my obsolete DTP Newdesk, I got at a car boot sale, will even buy original you have in limbo. Evenings: 052 98 316. Genuine Fast.

BBC Video Digitiser about £40 or will swap for Opus 40-Track Drive. (Needs attention). Also want 3.5" Drive. Simon Guerrero, 7 Matthews Road, Highfields, Stafford. Software for sale also. (£1 - £10).

PC engine games wanted, will pay up to £20 for any one I haven't got, like Bloody Wolf, Ordyne, Side Arms etc. Call for Tie after 8pm. (0932) 63579.

SWAP my C64 for your Speccy +3 or Speccy Disk Drive and I/F (Plus D or Disciple preferred). Interested? Phone: (0287) 24141 and ask for Greg.

CACHET Music Sound System II wanted for Amiga, urgent need of orig. prog. and manual. Ring (0928) 567400 ask for Bri after 8pm.

WANTED; Amiga software (games and video utilities) for new A500 enthusiast. I would also consider peripherals eg. Drives, Printer, Monitor etc. Complete set ST/Amiga Format Magazines wanted (Derbyshire) 0773 749630.

PC engine games wanted, will pay up to £20 for any one I haven't got, like Bloody Wolf, Ordyne, Side Arms etc. Call for Tie after 8pm. (0932) 63579.

SO YOU BOUGHT A HANDY SCANNER

Can the software supplied with your scanner create **SLIDE SHOWS** or **MOVIES?** - Can it **FADE** or **ENHANCE** your image? - Can it **ENLARGE** or **REDUCE?** - Can it **ROTATE, SLANT,** add **COLOUR** or create **OUTLINES?** - Can it **READ IN A TEXT FILE?** - Can it **SHADOW?** - Can it **MIRROR** or **FLIP?** - Can it **XOR, AND, PSET, PRESET, OVERLAP** or **INVERT?** - Can it save or load **.TIF, .MSP, .PCC, .PCX, .IMG, .CUT, .OCR or .FAX** formats? - Can it load/edit different **PATTERNS** or **PALETTES?** - Can it be accessed from a **DBASE(Clipper), C, PASCAL, BASIC** or **ASSEMBLY** language program? - Can it print using **9/24 PIN EPSON** Mono or Colour Compatibles **LASERJET** or **PAINTJET** printers?

If you want these features + 35 more then you need the Superb IMAGE72

Package (Includes NEW Interface Card, Software and Manual)

NEW OPTIONAL OCR AVAILABLE-PLEASE CALL

ACCESS - VISA

Another First From

faber ELECTRONICS

ONLY £49

VAT EXCLUDED

Tel: 0923 242910 FAX: 0923 36810

Unit 2, Clive Way
WATFORD
WD2 4PX

SENSATIONAL SCOOP PURCHASE

We have purchased the entire stocks of AMSTRADS super stylish Computer desks.

These modern stylish desks are in dark grey finish, and are self assembly. They can be assembled with a screwdriver in less than 10 minutes, and are extremely strong and practical. Normal price is £39.99 but we are offering these at the incredible low price of £9.99 + P.P. YES - only £9.99 for this superb computer desk.

To be sure of your order, and avoiding dissapointments rush the order form below with your remittance. Sorry no C.O.D.

CREDIT CARD HOT-LINE

021-568 6464

ENQUIRIES: 021-568 6400 FAX: 021-588 6003
Anglo European Marketing (Mail order Div)
61-66 Owen Road ind. Est. Willenhall West Midlands.

SAME DAY DESPATCH

BY POST

To: **ANGLO EUROPEAN MARKETING (MAIL ORDER DIV)**
61-66 OWEN ROAD IND EST WILLENHALL. WEST MIDS.
TEL:021 568 6464 FAX:021 568 6003 G Eng. 021-568 6400

PLEASE RUSH ME ..... AMSTRAD COMPUTER DESK(1)

AT £9.99 + £4.00P.P. I ENCLOSE CHEQUE/PO. Or charge my Access/Visa

Exp. Date_____

Name: _____

Signature: _____

Address: _____

Post Code: _____ Tel No. _____

CASH CALLERS WELCOME

TEL 0270 666616

MEDIA

PRINTERS

SPECIAL OFFER:
1 YEAR ON-SITE MAINTENANCE ONLY £15.00 (ON SELECTED MODELS).
FREE IBM CABLE WITH ALL PRINTERS OVER £150.00

PANASONIC

KXP 1081	118.50
KXP 1180	144.00
KXP 1124	238.00
KXP 1592	258.00
KXP 1595	319.00
KXP 1540	404.00

MANNESMAN TALLY

MT81	99.00
MT91	529.00

STAR

LC 10	128.00
LC 10C	168.00
LC 15	249.00
LC 24-15	304.00
NX 15	255.00
FR 10	298.00
FR 15	385.00
XB24-10	385.00
XB24-15	523.00

EPSON

LX 400	128.00
LX 850	177.00
FX 850	363.00
FW 1050	380.00
EX 800	423.00
EX 1000	545.00
LQ 400	194.00
LQ 550	259.00
LQ 850	438.00
LQ 860	519.00
LQ 1050	524.00
LQ 1060	649.00
LQ 2550	835.00
DFX 5000	1153.00
TLQ 4800	1445.00
SQ 850	597.00
SQ 2550	866.00

HEWLETT PACKARD

Thinkjet	289.00
Quietjet	354.00
Quietjet +	419.00
Desk Jet	449.00
Desk Jet Plus	549.00
Paint Jet	699.00

CITIZEN

120D(Parallel)	104.00
180E	124.00
MSP I5E	184.00
MSP 40	198.00
MSP 45	247.00
MSP 50	286.00
MSP 55	289.00
Swift 24	249.00
HQP 40	294.00
HQP 45	363.00

DICONIX PORTABLES

150	242.00
300	412.00
300W	482.00

BROTHER

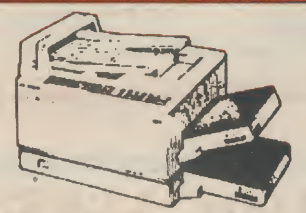
1109	128.00
1209	164.00
1224	252.00
1818	325.00
1824	422.00
HR 20	364.00
HR 40	682.00
1724	473.00
1709 XL	566.00
2518	630.00
2524	713.00
Twinwriter 5	738.00
4018	1171.00
4018 XL	1296.00
3524	941.00

NEC

P2200	233.00
P6+	419.00
P7+	539.00
P9XL	858.00

ALSO AVAILABLE: SHEET FEEDERS, RIBBONS, LISTING PAPER, FONTS ETC. CALL FOR PRICES

LASER PRINTERS



PANASONIC KXP 4450	11PPM	1315.00
BROTHER HL-8E	8PPM	1369.00
BROTHER HL-8D	8PPM	2185.00
BROTHER HL-8PS	8PPM	2520.00
EPSON GQ5000	6PPM	1150.00
STAR LP8	8PPM	1199.00
STAR LP8-11T	8PPM	1695.00
HP LASERJET IIP	8PPM	985.00
HP LASERJET II	8PPM	1260.00
HP LASERJET IID	8PPM	1945.00
KYOCERA F1000	10PPM	POA
KYOCERA F1200	10PPM	POA
KYOCERA F22005	10PPM	POA
KYOCERA F3000	18PPM	POA
KYOCERA P2000	10PPM	POA
MANNESMAN TALLY MT 905	6PPM	905.00
QUME CRYSTAL PRINT WP	6PPM	815.00
QUME CRYSTAL PRINT II	6PPM	1110.00
QUME CRYSTAL PUBLISHER	6PPM	2115.00
OLIVETTI PG 208	8PPM	1260.00
OLIVETTI PG 306	6PPM	980.00

MOST LASERS HAVE FREE1 YEAR ON-SITE MAINTENANCE - PLEASE CALL

SCANNERS

CANON IX12 IMAGE SCAN	730.00
CANON IX12F	995.00
CANON INTERFACE	150.00
PANASONIC FX-R5505	1049.00
DFI HS3000 + (HANDY SCANNER)	145.00
OCR SOFTWARE	60.00
OCR DELUXE	110.00
LOGITECH HANDYSCAN	199.00

GRAPHIC CARDS

ORCHID DESIGNER 800	175.00
ORCHID PRO DESIGNER	240.00
ORCHID PRO DESIGNER +	349.00
VIDEO 7 VGA	189.00

NEW NEW NEW NEW NEW

UPGRADE YOUR LASERJET II OR CANNON LBP TO A FULLY FUNCTIONAL POSTSCRIPT COMPATIBLE PRINTER

35 RESIDENT POSTSCRIPT FONTS. FASTER THAN TYPICAL POSTSCRIPT PRINTERS

EICON CARD ONLY **£1395**

LASER TONERS

HP LASERJET I	57.50	KYOCERA 2 PACK	68.00
HP LASERJET II	58.50	CANON A1/A2	59.95
PANASONIC KXP 4450	28.00	EPSON	16.50
		QUME 2 PACK	89.00

FULL RANGE OF MEMORY AND FONTS AVAILABLE FOR ALL LASERS

TAPE STREAMERS

WANGTEK (INC. SYTOS SOFTWARE)

IBM PC/XT/AT COMPATIBLE.

40MB HALF HEIGHT INTERNAL	274.00
60MB HALF HEIGHT INTERNAL	495.00
40MB EXTERNAL	359.00
60MB EXTERNAL	575.00

DATA SWITCHES

SERIAL/RS232 2 WAY	12.50
SERIAL/RS232 4 WAY	18.50
SERIAL/RS232 X-OVER	19.95
PARALLEL/CENT 2 WAY	14.00
PARALLEL/CENT 4 WAY	19.50
PARALLEL/CENT X-OVER	20.95

DISK DRIVES

3.5" 720K EXTERNAL FOR AMSTRAD 1512/1640	94.00
3.5" 720K INT. FOR 5.25" SPACE (INC. FRAME)	69.00
5.25" 360K/1.2MB EXT. SWITCHABLE FOR PS/2 USERS	189.00
5.25" 360K INTERNAL (INC. FRAME)	89.00

HARD CARDS

WESTERN DIGITAL 20MB	169.00
WESTERN DIGITAL 32MB	188.00
WESTERN DIGITAL 40MB	249.00

ALL ABOVE INCL.UDE XTREE SOFTWARE

MONITORS

NEC 14" MULTISYNC 2A	329.00
NEC 14" MULTISYNC 3D	449.00
NEC 15" MULTISYNC +	720.00
NEC 20" MULTISYNC XL	1298.00
16" MONOGRAPH PAPER WHITE	868.00
SAMSUNG 12" FST TTL GREEN	69.00
SAMSUNG 12" FST TTL AMBER	75.00
SAMSUNG 12" FST TTL WHITE	75.00
SAMSUNG 14" FST TTL GREEN	79.00
SAMSUNG 14" FST TTL AMBER	85.00
SAMSUNG 14" FST TTL WHITE	89.00
SAMSUNG 14" EGA/CGA	249.00
SAMSUNG 14" VGA	249.00
SAMSUNG A4 PAPER WHITE INC. GRAPHICS CARD	673.00
PHILIPS/AHKTER 12" 7513 MONO	69.00
PHILIPS 14" CM 8833 CGA	189.00

TERMINALS

WYSE TERMINALS

WYSE 30	243.00	WYSE 60	329.00
WYSE 50	293.00	WYSE 85	343.00

PLOTTERS

HITACHI

672 A4/A3	449.00	674 A4/A1	2229.00
673 A4/A3	649.00	681 A4/A3	549.00

ROLAND

DXY 880	POA	DXY 1300	POA
DXY 1100	POA	DXY 2200	POA
DXY 1200	POA	DPX 3300	POA

FULL RANGE OF PENS/PAPER AVAILABLE

CO-PROCESSORS

INTEL CO-PROCESSORS

8087 5MHZ	70.00	80287 10MHZ	195.00
8087 8MHZ	103.00	80387 16MHZ	254.00
8087 10MHZ	145.00	80387 20MHZ	320.00
80287 6MHZ	115.00	80387 25MHZ	585.00
80287 8MHZ	175.00		

PRINTER CABLES

2m IBM PRINTER CABLE	6.00
3m IBM PRINTER CABLE	6.95
2m CENTRONICS M/M	6.50

MCE/GRAPHICS

GENIUS GM6 +	28.95
GENUIS GM6000	36.50
PC OPTICAL II, INC PC PAINT	105.80
MOUSE MATS	2.99
GENUIS GT-1212 GRAPHICS TABLET 12"X 12"	265.00

DATA CARTRIDGE

3M DATA CARTRIDGES

DC1000	11.80	DC600A	16.90
DC2000	14.30	DC600XTD	16.20

FULL RANGE EX. STOCK

MEDIAWARE

MEDIAWARE

WARE

FAX 0270 665556

BRANDED DISKS

SONY. 3M DYSAN Verbatim.

3M

BOXES OF 10	1-2	3-9	10+	25+
5.25" 744 SS-DD 48 tpi	5.80	5.40	4.80	4.40
5.25" 745 DS-DD 48 tpi	6.20	5.70	5.00	4.25
5.25" 747 DS-DD 96 tpi	9.50	9.20	8.60	8.25
5.25" 799 DS-HD 96 tpi	9.90	9.60	8.90	8.50
3.5" SS-DD 136 tpi	10.90	10.00	9.70	9.20
3.5" DS-DD 136 tpi	12.50	11.60	10.70	10.00
3.5" DS-HD 2.0 Mb	27.50	26.75	24.00	22.00

VERBATIM DATALIFE

BOXES OF 10	1-2	3-9	10+	25+
5.25" SS-DD 48 tpi	5.7O	5.30	4.60	4.20
5.25" DS-DD 48 tpi	6.1O	5.50	5.20	4.50
5.25" DS-SS 96 tpi	9.4O	8.90	8.70	8.40
5.25" DS-HD 1.6 Mb	9.70	9.20	8.90	7.75
3.5" SS-DD 135 tpi	10.00	9.50	9.00	8.75
3.5" DS-DD 135 tpi	11.00	10.50	10.00	9.30
3.5" DS-HD 2.0 Mb	26.00	25.00	23.00	21.00

SONY

BOXES OF 10	1-2	3-9	10+	25+
5.25" SS-DD 48 tpi	6.10	5.60	4.90	4.60
5.25" DS-DD 48 tpi	6.20	5.70	5.00	4.60
5.25" DS-QD 96 tpi	10.00	9.60	9.40	9.00
5.25" DS-HD 1.6 Mb	10.50	10.00	9.50	9.00
3.5" SS-DD 135 tpi	11.00	10.00	9.00	8.30
3.5" DS-DD 135 tpi	12.00	11.50	10.50	8.30
3.5" DS-HD 2.0 Mb	27.50	26.50	24.00	22.00

VERBATIM VEREXI

BOXES OF 10	1-2	3-9	10+	25+
5.25" DS-DD 48 tpi	3.70	3.55	3.45	3.35
5.25" DS-QD 96 tpi	6.50	6.30	6.20	6.00

DYSAN

BOXES OF 10	1-2	3-9	10+	25+
5.25" DS-DD 48 tpi	6.30	5.80	5.30	4.95
5.25" DS-QD 96 tpi	9.70	9.30	8.90	8.60
5.25" DS-HD 1.6 Mb	9.90	9.70	9.20	8.70

5.25" BULK DISKS 3.5"

5.25" DISKS	50	250	500	1000
SS-DD 48tpi	.24	.22	.20	.18
DS-DD 48tpi	.24	.22	.20	.18
DS-QD 96tpi	.26	.24	.23	.21
DS-HD 1.6Mb	.52	.49	.48	.46

3.5" DISKS	50	250	500	1000
SS-DD 135 tpi	.62	.57	.53	.47
DS-DD 135 tpi	.63	.59	.55	.49
DS-HD 2.0 Mb	1.65	1.63	1.58	1.49

BULK DISKS ARE CERTIFIED 100% ERROR FREE. PRICES ARE PER DISK & INCL. ENVELOPES AND LABELS

LOCKABLE STORAGE BOXES WITH DISKS

5.25" DISKS AND BOXES

25 x 5.25" DS-QD 96 tpi Disks with 50 Capacity Lockable Box	10.86
50 x 5.25" DS-QD 96 tpi Disks with 100 Capacity Lockable Box	16.00
100 x 5.25" DS-QD 96 tpi Disks with 100 Capacity Lockable Box	25.50

3.5" DISKS AND BOXES

25 x 3.5" DS-DD 135 tpi Disks with 40 Capacity Lockable Box	19.95
45 x 3.5" DS-DD 135 tpi Disks with 80 Capacity Lockable Box	29.95
75 x 3.5" DS-DD 135 tpi Disks with 80 Capacity Lockable Box	49.95

IF HIGH DENSITY DISKS ARE REQUIRED: ADD 30p PER 5.25" DISK AND/OR 90p PER 3.5" DISK

"MAKE EASY" PRODUCTS

PRINTER STAND		COPY HOLDER	
YU-25A 80 Col.	£24.00	Adjustable Desk Clamping	£12.50
YU-25B 130 Col.	£29.00		
STORAGE BOXES		VDU ARM	
3.5" 40 Disk Box	£5.99	Heavy duty (65lbs) Fully adjustable Wall, Desk or Clamping fittings	£89.00
3.5" 80 Disk Box	£6.50		
5.25" 50 Disk Box	£5.99		
5.25" 100 Disk Box	£6.50		
4 -W SURGE STRIP	£14.95	1-W SURGE ADAPT.	£8.99

DELIVERY CHARGES (UK MAINLAND)

OVERSEAS DELIVERIES EXTRA BY SPECIAL ARRANGEMENT

LASER PRINTERS: £10.00 PLUS VAT

OTHER HARDWARE: £5.00 PLUS VAT

CONSUMABLES: £2.50 PLUS VAT (FREE D/Y OVER £30.00)

NORMAL DELIVERY: 4 WORKING DAYS - NEXT DAY DELIVERY EXTRA

Account Terms available for Government, Education & PLC Establishments on 7 or 30 day basis. Please call for details

ALL PRICES EXCLUDE VAT

0270 - 666616

MEDIAWARE LIMITED

Unit 9, Huntsbank Industrial Estate
Crewe Road, Wistaston
Crewe, Cheshire, CW2 6QT
Tel: 0270 - 666616/664236

E & OE All prices and supplies subject to change without notification

To: MEDIAWARE, Unit 9, Huntsbank Industrial Estate, Crewe Road, Wistaston, Crewe, Cheshire, CW2 6QT

I wish to order _____

My Computer is _____

I enclose Cheque/PO for £_____ inc VAT & P/P

Or charge my Access/Visa No. _____ Exp. Date_____

Name_____ Signature_____

Address_____

Postcode_____ Tel No. _____

PRICES CORRECT AT TIME OF GOING TO PRESS

MEDIAWARE

MEDIAWARE

XENON TECHNOLOGY

GAMES SOFTWARE

TITLE	RRP	XTP
Action Fighter	24.99	16.45
Adidas Golden Shoe	19.99	13.45
Altered Beast	24.99	16.45
A.P.B	19.99	13.45
Balance Of Power 1990	24.99	16.45
Batman The Movie	19.99	13.45
Beach Volley	19.99	13.45
Blood Money	24.95	16.45
Bloodwych	24.99	16.45
Caba!	19.99	13.45
Castle Warrior	19.99	13.45
Chaos Strikes Back	19.99	13.45
Chicago 90	19.95	13.45
Dragon Spirit	19.99	13.45
Dragon' Lair	44.95	29.45
Dynamite Dux	24.95	16.45
Emperor Of The Mines	24.99	16.45
Falcon II (Mission Disk 1)	19.99	13.45
Ferrari Formula 1	24.99	16.45
Fiendish Freddie's Big Top	29.99	19.45
Future Wars	24.95	16.45
Galaxy Force	24.95	16.45
Gemini Wing	19.99	13.45
GhostBusters	24.95	16.45
Golden Oldies	9.95	6.45
Highway Patrol	24.95	16.45
Indiana Jones/Last Crusade	19.99	13.45
Infestation	24.95	16.45
Iron Tracker	19.95	13.45
Ivanhoe	19.99	13.45
Knightforce	24.95	16.45
Laser Squad	19.95	13.45
Last Ninja 2	24.99	16.45
Leonardo	19.99	13.45
Light Force	24.99	16.45
Matrix Marauders	19.95	13.45
Monopoly Deluxe	19.99	13.45
Mr. Heli	24.99	16.45
Never Mind	19.95	13.45
New Zealand Story	19.99	13.45
North & South	24.95	16.45
Passing Shot	19.99	13.45
Pirates	24.95	16.45
Populous: Promised Lands	9.99	6.45
Power Drift	24.95	16.45
Quarterback	19.99	13.45
Rainbow Island	24.99	16.45
Rainbow Warrior	24.99	16.45
Red Lightning	29.99	16.45
Rick Dangerous	24.99	16.45
Risk	19.95	13.45
Rocket Ranger	29.99	19.45
Shinobi	19.99	13.45
Soccer	19.99	13.45
Star Wars Trilogy	24.99	16.45
Stryx	19.95	13.45
Stunt Car	24.95	16.45
Super Quintet	24.95	16.45
Super Wonder Boy	24.95	16.45
The Lost Patrol	19.99	13.45
Triad II	24.95	16.45
TV Sports Football	24.99	16.45
Verminator	24.99	16.45
Xenon II - Megablast	24.99	15.75
Xenophobe	24.95	16.45

F-16 Combat Pilot Editor (£4.95)

Edits:
- Pilot's Name
- Pilot's Callsign
- Squadron
- Rating
- Hours & Kills
- Campaign Hours & Kills
- Aircraft Lost
- Missions Completed
- Next Map To Be Used

Want to play Operation Conquest but can't complete all the missions? Sure - just cheat and alter your mission marks! Like the map you're playing on, don't want a new one for your next campaign? No problem! Wipe those black marks from your record? Easy! Early promotion? Why not! Wanna be topgun? Sure go ahead!

GUNSHIP EDITOR (£4.95)

Edits:
- Pilot's Name
- Score
- Status
- Rank
- Decorations (medals etc)
- Reprimands

So you're missing in action or just plain dead? Show God a thing or two and resurrect yourself! Wanna show your gongs to the ladies! (oo-er!) Here, have a congressional medal or two... Want some more stripes on your sleeve? Certainly- Colonel! Wipe those nasty reprimands? Yeah, go ahead!

AIRBOURNE RANGER EDITOR (£4.95)

Edits:
- Rangers Name
- Score
- Status
- Rank
- Campaign Duty
- Decorations

Stuck on a campaign with nowhere to go? Sneak out with ease! Dead or missing? Nah must have been a mistake... Want some more medals? Sure. Add a little to your score? Ok! Want to go up in the ranks? No problem!

ELITE Editor (£9.95)

Edits:
- Commander's Name
- Legal Status
- Credits
- Equipment
- Cargo
- Weaponry
- Next mission to be played and countdown to it
- Planet
- Galaxy

Waiting around for a mission? Cut down the waiting time to mere seconds! Mission too tricky for you? Skip on to the next one! Lost your cargo to some Thargoid scumball. Get it all back for free! Cops after you? Change your legal status to clean! Outgunned by the pirates? Have a megablast at no charge! Stuck in the middle of nowhere? Jump to somewhere completely different without using a drop of fuel! A little strapped for Cash? Have LOADSAMONEY

BUSINESS SOFTWARE

TITLE	RRP	XTP
Mark Williams C Version 3.0	129.00	96.45
ANTIC:		
Spectrum 512 (512 Colour paint package)	59.95	44.45
CAD /D Version 1.0(3 dimensional CAD)	24.95	18.45
Plotter and Printer Drivers (CAD 3D VR1.0 Accessory)	24.95	18.45
BASE II (Database)	59.95	44.45
Colr Object Editor (Sprite Editor)	24.95	18.45
Crystal (Desk Accessory)	24.95	18.45
Expert Opinion (Expert System)	49.95	37.45
Genesis (Molecular design aid)	79.95	59.45
Gist (Sound Development)	34.95	26.45
Flash (Communications)	24.95	18.45
Navigator %(Flight Planner)	49.95	37.45
Pie (Icon Editor)	29.95	22.45
Quicktran (Modem Accelerator)	34.95	26.45
Star Struck (Astrology)	24.95	18.45
ANTIC CYBER SERIES:		
Cyber Studio (CAD 3D 2.0 & Cybermate)	79.95	59.45
Cyber Control (Animator for Cyber Studio)	59.95	44.45
Cyber Paint (2D drawing & animation)	69.95	52.45
Cyber Sculpt (3D Sculpting)	79.95	59.45
Cyber Texture (3D Sculpting)	49.95	37.45
3/D Developers Disk (CAD 3D 2.0 Accessory)	29.95	22.45
Architectural Design Disk (CAD 3D 2.0 image Library)	29.95	22.45
Cartoon Design Disk (Cartoon Characters/animation)	29.95	22.45
Future Design Disk (CAD 3D 2.0 image library)	24.95	18.45
Huiman Design Disk (CAD 3D 2.0 image library)	29.95	22.45
Microbot Design Disk (CAD 3D 2.0 image library)	29.95	22.45
Video Titling Design Disk (3D font and objects)	29.95	22.45
Sterotek (3D spectacles)	149.95	112.45
3D Fonts 1 (3D font)	29.95	22.45
3D Font 2 (3D font)	29.95	22.45
GST		
1st Mail (Mailmerge for 1st word)	14.95	11.45
1st Word Plus (English wordprocessor)	79.95	59.45
1st Word Plus (French wordprocessor)	79.95	59.45
68000 Macro Assembler (editor/assembler/linker)	19.95	14.45
Fractal Generator (Educational /Entertainment)	19.95	14.45
GSTC (Introductory C compiler)	19.95	14.45
MIGRAPH		
Easy Draw 2 (Drawing program)	59.95	44.45
Supercharged Easy Draw 2 (draw/paint/import)	99.00	73.45
Easy Tools (Easy draw accessory pack)	39.95	29.45
Scanart (Clip-art library)	39.95	29.45
Drawart (Clip-art library)	39.95	29.45
Borders (Border library)	29.95	22.45
TIMEWORKS		
Data Manager Professional (GEM relational database)	69.95	52.45
Data Manager (database)	39.95	29.45
Swiftcalc (spread-sheet)	39.95	29.45
Word Writer (wordprocessor)	49.95	37.45
Timeworks Publisher (desk-top publishing)	99.00	73.45
Partner ST (Desk accessory pack)	49.95	37.45
VALUETIME		
Let's Make Calendars and Stationary (Instant print)	9.95	6.45
Let's Make Greeting Cards (instant print)	9.95	6.45
Let's Make Signs and Banners (instant print)	9.95	6.45
Art Library 1 (Clip art pack)	9.95	6.45
Art Library 2 (Clip art pack)	9.95	6.45

Xenon Technology, NCE 1A, 71 Wadham Road, North End, Portsmouth, Hampshire, PO2 9ED
Telephone: (0705) 670878. Please make all cheques or postal orders payable to "Xenon Technology".
All prices include VAT, postage, packaging and a full guarantee (please add £1.35 per item overseas).
All goods are dispatched within 24 hours (subject to availability). New Titles Sent Day Of Release.

imagitec
design ltd

"COME CLOSER
MY FRIEND,
I have an interesting deal to make . . ."

Imagitec Design Limited, the largest entertainment software development house in the UK, is looking for talented souls. An unusual request you might think, but then, here at Imagitec, where we produce some of the most innovative software to be seen on both sides of the Atlantic, we've always had an eye for the unusual.

We are looking for more in-house programmers, artists, musicians and designers to join our current team of 35, based at our UK and Denmark offices. If you feel that you can program in 68000, 8086, Z80, 6502, V30, C or you possess good artistic, musical or design skills and original ideas, then we would like to hear from you.

We can't promise you eternal life, or anything even vaguely magical, but we do offer competitive salaries, good promotion prospects and pleasant, well equipped development facilities.

If you are still interested, and would like further details, then please call:
Neil Young or Martin Hooley
on (0924) 490345

or send a written application to:
Imagitec Design Limited
The Old Mill House
118 Shillbank Lane
Mirfield
West Yorkshire
WF14 0QT

. . . and perhaps we can do you a deal . . .

Amiga/Atari ST/ IBM PC

Programmers required NOW!

To join existing Oxford city based team for exciting 3D project.

A unique opportunity to be involved with leading - edge software technology.

'C' programming experience important, terms and conditions by negotiation.

Call: (0865) 791774

Or write to:
Technical Director
S.P.A.
27-28 Park End Street
Oxford OX1 1HU

REQUIRED ASSISTANT MANAGER (RETAIL)

Due to expansion Power Computing, one of the UK's leading mail-order houses and peripheral manufacturers, has an immediate vacancy for an Assistant Manager.

Working under the General Manager, you will be responsible for the day to day management of our retail and mail order departments, at our Bedford Head Quarters.

The right person will have a pleasant sales manner, be technically competent with 16 Bit personal computers, including, PC, Amiga and Atari ST, able to control a small staff team and work consistently under pressure.

Minimum 2 years retail/sales experience is essential.

Salary to £12k depending on age and experience. Plus benefits you would expect from a £2m+ company.

C.V. and a letter of application to: Mr K Browning
Power Computing Ltd
44A Stanley St
Bedford
MK41 7RW

Or Telephone: **0234 273248** for an informal discussion.

POWER COMPUTING

CAPITAL COMPUTER

PC SUPPORT TECHNICIAN
£14.5K - £18K+ B.B.s
Excellent opportunity for a Junior Support Technician to move into the exciting world of international banking. Working as part of a professional in-house support team, the successful applicant will have the chance to get involved in many aspects of support including networking trouble-shooting and user training you should have good knowledge of databases, spreadsheets, W.P.S & L.A.N.S.

ANALYST PROGRAMMER
£15k - £19.5k
Our client a large insurance organisation requires an experienced P.C Programmer with a substantial financial background. Technical ability will include 2 years D-Base 111 +/Clipper development and ideally a good knowledge of assembler and 'C'. Excellent career prospects are offered for an enthusiast and self-motivated individual.

399-401 HIGH STREET · STRATFORD · LONDON · E15 4OZ
TELEPHONE · 01 534 4525 · FAX · 534 4662 ·

Tiertex

TIERTEX Ltd
10A Barlow Moor Road, Didsbury, Manchester M20 0TR

Due to major expansion, one of the U.K.'s most experienced development houses requires the following individuals to complement its current in-house team.

★ PROGRAMMERS ★

&

★ GRAPHIC ARTISTS ★

The above positions are full time and based at our new Manchester offices. Renumeration is dependant on experience and a comprehensive bonus scheme will also be included.

The successful applicants would be working on the creme of Coin-Op conversions and exciting original projects for Europe's top software publishers.

If you think your work measures up to our past projects like Thunder Blade, Last Duel and 720, please send examples of your work together with a C.V. to the above address.

Alternatively, phone Andrew Ingram on 061 446 2251 to discuss these opportunities further, all applications will be dealt with in the strictest confidence.

Software Support

Arnor Ltd, successful and expanding publishers of business software including **Protext** have a vacancy in technical support. Responsibility and technical ability are the requirements that will be fufilled by the successful applicant. Based in Peterborough.

A good salary will be paid depending on experience. Contact Mark for further details at:

Arnor Ltd
611 Lincoln Road
Peterborough PE1 3HA
Tel: (0733) 68909 Fax: (0733) 67299

☞ Computer Support ☞

Southeast England

£18,000 per Annum + Car

Large distributor based Southeast England searching for PC Specialists with an IBM background. Good broad base of PC skills and inter-personal skills. Many other technical and sales positions available now.

Please contact: Paul Dunne
Daytime: 01 839 2319
Evenings and Weekends: 01 398 0942
or send your C.V. to:
Specialist Technology Recruitment
94 Jermyn Street, London, SW1Y 6JL.

P. D. SYSTEMS

Require fast and efficient assembly language programmers to work inhouse in our London offices.

Projects are varied and applicants should have enthusiasm, skill and a capacity to learn.

Call **01-978 1844** for details or write to:

P. D. Systems
2nd Floor, Abbey House
376 Wandsworth Rd
London
SL8 4TE

AT VEKTOR GRAFIX WE HAVE A RATHER UNUSUAL ATTITUDE TO OUR PROGRAMMERS

We treat them like people

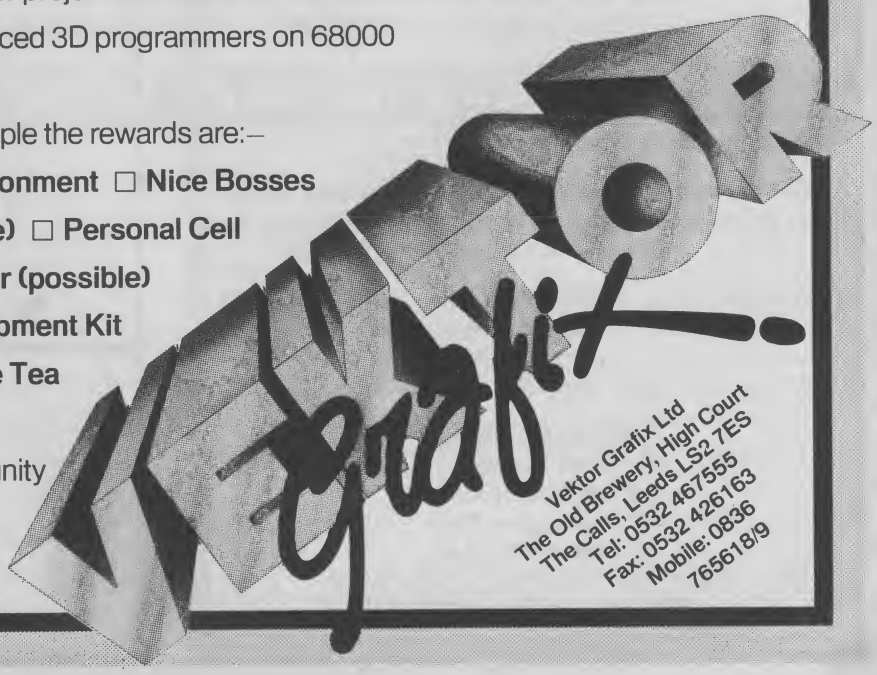
We do not promise fast cars and an exotic life style (though some of our guys do enjoy that). What we offer, is a relaxed, creative and friendly atmosphere.

■ WE NEED experienced 3D programmers to join our existing development team to work on exciting new projects for the 90's. We have immediate vacancies for experienced 3D programmers on 68000 and MS-DOS.

■ For the right people the rewards are:–

☐ Great Working Environment ☐ Nice Bosses ☐ Psion Organiser (possible) ☐ Personal Cell Phone (possible) ☐ Company Car (possible) ☐ Comfy Chair ☐ 286 or 386 Development Kit ☐ Parking Space (if you're early) ☐ Free Tea and Coffee ☐ Not Bad Salary

If you're interested in checking this opportunity out then call Andy Craven or John Lewis immediately.



D & H games are constantly looking for outhouse programmers. Do the following questions apply to you?

1 Want to earn top money working from home?

2 Are you competent in machine code on the Spectrum, C64, Amstrad, ST or Amiga?

3 Interested in converting games to your computer, making games up on your computer or a graphics artist wishing to make up screens on your computer.

If your answer to these three questions is yes, then write to us at the address below, including some examples of your work and we will get straight back to you.

Dept NCE, 114 Clifton Road, Shefford, Bedfordshire, SG17 5AN, England
Tel: (0462) 816103

MOLESEY EDUCATION

Trainers on all systems required to cover England and Wales on a freelance basis, experience essential, teaching or training qualifications preferred.

In the first instance please send full C.V. to:

Philippa Weitz,
Molesey Education, Flat 3,
10 Matham Road, East Molesey KT8 0SU
or phone 01-941 1364
for further details.

Chess Computer Appointments Ltd
Search, Selection and Advertising Consultants
Princes House, 36-40 Jermyn Street, London SW1Y 6DN
Telephone: 01-439 6141
Fax: 01-287 6701

ANALYST PROGRAMMER (Experienced and Graduate)
International Bank — £12-18k + Bank Benefits

Programming experience in Clipper, 'C' or dBase or simply a structured computing background eg. Computer Studies graduate, will qualify you for a desirable career move in to the dealing rooms of this major institution. Involves much analysis and user liaison with the promise of increased responsibilities for capable individuals.

TRAINERS AND SENIOR TUTORS (Management Prospects)
Salary according to ability

This household name in office services is currently running a recruitment drive for word processor and software tutors.
If you have experience in Wordcraft, Wordstar, Wordperfect, Multimate, Samna, Lotus, Symphony, dBase, Smart, any dtp package, UNIX or any popular "off the shelf" package and are interested in furthering your training career with a structured, professional organisation - call us now!

TECHNICAL SOFTWARE SUPPORT — £10-14k + Car

Micro computer manufacturer requires PC support specialists with 6 months+ experience. Probably from an end user or dealership background, you will have a good knowledge of a variety of "off the shelf" packages eg, dBase, Lotus, Multimate, Pegasus etc. to provide support to dealers, distributors and VAR's.

ACTUAL SCREENSHOTS

"What you see is what you get"

Actual screenshots is looking for the best programmers, graphics artists and new games for the Amiga, Atari ST and PC machines.

If you think your standards could match ours, send your demos with full details to:

ACTUAL SCREENSHOTS, 7D KINGS YARD, CARPENTERS ROAD, LONDON E15 2HD

or contact MICHAEL HODGES or ADRIAN TURNER on

(01) 533 2918

Actual Screenshots

WJS DESIGN

Creators of BAAL and BLOOD MONEY (ST)

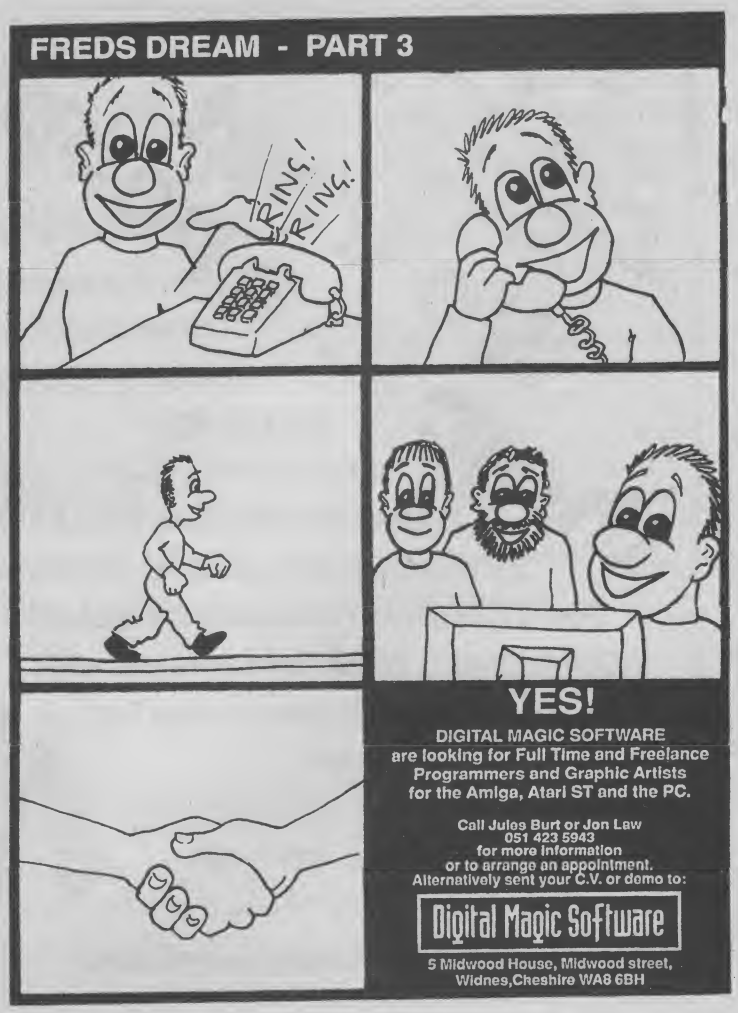
Are seeking an experienced 68000 programmer to work **in house** on original projects for the Atari ST and Commodore Amiga computers.

Based in **Leeds**, we specialise in only the highest quality 16 bit software. We provide excellent technical back-up and a 386PC. PDS development system to work on.

If you think you fit the bill, could code a mega-game with your eyes shut, are friendly, non-smoker and all round a pleasant kind of chappy (or chapess), then telephone in the first instance for a chat. Ask to speak to:-

Wayne Smithson
WJS Design
Park Mill House
Stanningley Road
Leeds LS12 3LR.

Tel: 0532 636554 Fax: 0532 636634


FREDS DREAM - PART 3
RING! RING!
YES!
DIGITAL MAGIC SOFTWARE
are looking for Full Time and Freelance Programmers and Graphic Artists for the Amiga, Atari ST and the PC.
Call Jules Burt or Jon Law
051 423 5943
for more information
or to arrange an appointment.
Alternatively sent your C.V. or demo to:
Digital Magic Software
5 Midwood House, Midwood street, Widnes,Cheshire WA8 6BH

PLACE AN AD - FREE!

Selling an old computer? Need some help? Got any tips? Run a bulletin board? In charge of a user group? After a second hand bargain? You've come to the right place. Just fill in the formto place a free classified advertisement in Shopping Express

Send your ad to: Reader Ads, New Computer Express, 4 Queen Street, Bath BA1 1EJ

READER ADS ORDER FORM

Terms and conditions

- Sorry, NO trade ads. All reader ads must be from private individuals
- We cannot vouch for the quality of goods and/or sevices offered in this section. all ads are accepted in ood faith
- We reserve the right to amend or refuse reader ads at our discretion
- No pirated software may be sold through these columns. Any reader being offered non-originals should contact us
- We cannot guarantee that reader ads will appear in particular issues of Express
- The following declaration must be signed:

My advertisement conforms to the terms above and is legal, decent, honest and true.

Signed.....

NAME .....

ADDRESS .....

.....

.....

TEL .....

Please tick the category you want your ad to go in: ☐Help Offered ☐Mini-tips ☐For Sale ☐Goods Wanted ☐Services ☐Events ☐Bugs Discovered ☐Virus warning☐ Humour ☐Announcements ☐User Groups ☐Bulletin Boards ☐Personal ☐Misc.

WRITE YOUR FREE AD HERE

COMMODORE AMIGA A500

MEGA PACK

Amiga A500, Workbench, Mouse, Extras Disk, Tutorial Disk, Owners Handbook, Basic Manual, TV Modulator, Mouse Mat, Ikari Warriors, Beyond The Ice Palace, Battleships, Buggy Boy, Xenon, Captain Blood, Arkanoid 2, Bomb Jack, Crazy Cars, Thundercats, Live and Let Die, Space Harrier, Joystick

ONLY £399.95

BATMAN MOVIE PACK

Amiga A500, Workbench, Mouse, Extras Disk, Tutorial Disk, Owners Handbook, Basic Manual, TV Modulator, Mouse Mat, Deluxe Paint 2, F18 Interceptor, New Zealand Story, Batman Movie Game

ONLY £369.95

BATMAN MOVIE + PACK

Amiga A500, Workbench, Mouse, Extras Disk, Tutorial Disk, Owners Handbook, Basic Manual, TV Modulator, Mouse Mat, Deluxe Paint 2, F18 Interceptor, New Zealand Story, Batman Movie Game, Ten Blank DSDD Disks, Disk Box holds 100 Disks, Vinyl Cover, Microswitch, Joystick

ONLY £389.95

ALL AMIGA PRICES INCLUDE VAT, FITTED PLUG AND DELIVERY

ATARI 520STFM

EXPLORER PACK

Atari 520STFM, Mouse, Owners Handbook, Metacomco Basic Rev D, Sourcebook + Tutorial, Ranarama Game

ONLY £279.95

POWER PACK A

Atari 520STFM, Mouse, Owners Handbook, First Basic, First Music, Business Organiser Software, 20 Great Games, Atari CX40 Joystick

ONLY £359.95

POWER PACK B

Atari 520STFM, Mouse, Owners Handbook, First Basic, First Music, Business Organiser Software, 20 Great Games, Atari CX40 Joystick, Vinyl Dust Cover, Twin Joystick Extend Lead, Disk Box for 100 Disks,Ten Blank DS/DD Disks, Second Joystick

ONLY £389.95

INCLUDING VAT AND DELIVERY

Plus FREE!! with any of the above Atari Packs a Superb Software Starter Pack comprising: WordProcessor, Spreadsheet, Spellchecker, Word Count Program, Neochrome, Mono Monitor Emulator, Database, Towers of Hanoi Game, Pacman Game, Sensori Game, Fruit Machine Game.

PERIPHERALS

STAR LC10 COLOUR PRINTER	STAR LC10 PRINTER	COMMODORE A1010 AMIGA DISK DRIVE	ATARI SM124 MONO MONITOR	CITIZEN 120D PRINTER	MAILCENTA 1MB AMIGA DISK DRIVE
£199.95	£169.95	£79.95	£109.95	£138.00	£79.95

ALL PERIPHERAL PRICES INCLUDE VAT, DELIVERY AND ANY LEADS NECESSARY TO CONNECT TO YOUR COMPUTER (PLEASE STATE)

MAIL-CENTA

17, Campbell Street, Belper, Derby. DE5 1AP. Tel: 0773 826830

All prices include VAT and Delivery. However for orders under £10.00 please add a 50p handling charge.Personal callers welcome at our retail shop but please bring this advert as prices may vary. Closed Wednesdays. All items despatched same day whenever possible. Cheques may require a seven day clearance period. Prop. Martin Bridges

VISA

BRANDED DISKETTES
100% ERROR FREE, DISCOUNT OFFER UNTIL 31st DECEMBER 1989

3 Boxes minimum, 5% discount on 25+ more.
3M, BASF, Dysan, Fuji, IBM, KAO, Maxell, Nashua, Precision, Sony, Verbatim and Bulk.

PRICES	3.5"	5.25"	8"
SS SD	--.--	--.--	£19.95
SS DD	£12.95	£7.50	£24.95
DS DD	£13.95	£7.95	£27.95
SS QD 96TPI	--.--	£11.95	--.--
DS QD96TPI	--.--	£12.50	--.--
DS HD	£30.95	£12.95	--.--

IBM Diskettes P.O.A. Bulk/Colour Diskettes from 46p per disk, prices are for 10/box. Also we have:

● Plotter Pens ● Data Cartridges ● Data Tapes/Cassettes
● Printers/Ribbons ● Co Processors/CPU
● Memory Chips/Cards ● VGA/Chargecards
● Modem Cards/Systems ● Other Accessories

Please call for full price list and products. All prices are inclusive of VAT and Postage, U.K. only. Goods fully money back guarantee. Prices are for payment with order, C.O.D. For London Postal areas only. Same day despatch of orders of any size. Cheques and Postal Orders payable to:

NADISYSTEMS We Accept EXPRESS VOUCHERS

143 Fairfoot Road, London E3 4EJ
Tel: 01 537 2119

If you own one of the following micros...

AMSTRAD – ATARI – AMIGA – BBC – ORIC
MSX – DRAGON – COMMODORE – 8-BIT
SPECTRUM – ARCHIMEDES EINSTEIN
ANY IBM COMPATIBLE

THEN YOU NEED TO COME TO

THE SCOTTISH MICRO SHOW!!

The Forum, Almondvale West, Livingston

Just off the M8 Edinburgh to Glasgow motorway.
Easy to find · Easy to park

SATURDAY, NOVEMBER 18, 10am – 5pm

★ ***SPECIAL OFFERS FOR THE SHOW ONLY*** ★

JUST IN TIME FOR CHRISTMAS!

For example: An 8-Bit computer complete with 3" built-in disk drive and colour monitor and much more... ONLY £275 complete.

Organised by B&H Computers, Bank Top, Southowram, Halifax. Tel: (0422) 330408. Traders wanting stands please call.

C&M MICROS

HOME & BUSINESS COMPUTER SUPPLIES

DON'T BUY DISKS OFFERING ANYTHING LESS!

FREE lifetime guarantee GOLD CARD. We are so confident with the unbelievable quality of all our disks that we give a lifetime guarantee GOLD CARD with each purchase of disks. Keep the card in a safe place so that lifetime guarantee support is only a phone call away if you should ever need it.

LIFETIME REPLACEMENT GUARANTEE, 100% ERROR FREE. COMPLETE WITH MULTI-COLOUR LABELS, TABS (5 1/4") AND PROTECTIVE SLEEVES.

We Accept EXPRESS VOUCHERS

3 1/2" unbranded disks manufactured by SONY
5 1/4" unbranded disks manufactured by SENTINEL

Bulk Disks	10	25	50	100	150	200	300	500
3 1/2" DS/DD (135)	£7.50	£18	£34	£66	£96	£124	£180	£290
5 1/4" DS/QD (96)	£3.50	£8	£15	£28	£41	£52	£76	£125
3" DS (Maxell)	£23	£57	£112	£219	£327	Phone for prices		

BRANDED DISKS MANUFACTURED BY THE SONY CORPORATION OF JAPAN

Sony Brand		1+	3+	5+	10+
3 1/2" DS/DD (135)	Boxes	£12.00	£11.50	£11.00	£10.50
5 1/4" DS/QD (96)	of 10	£12.00	£11.50	£11.00	£10.50

STRONG DISK BOXES. LOCKABLE WITH 2 KEYS, DIVIDERS & RECESSED HANDLE. Add £1 P&P if not ordered with disks.

3 1/2"	40 Capacity £4.50	80 Capacity	£6.50
5 1/4"	60 Capacity £4.50	100 Capacity	£6.50

★ **Special Offers**★ Latest *COLOURS*™ disk packs. 10 Coloured 3 1/2" disks (2 of red, orange, yellow, green, fog-white) in a clear fronted flip-top case. Only £9.50

MX1 - A500 1/2 Meg Memory expansion. 1 year guarantee £79.95
MX2 - Same as MX1 but with battery backed time and date £89.95

Amiga sys programmers guide ..... £31.30 Amiga C for beginners £17.55
Atari ST machine language ..... £18.00 Atari ST BASIC to C £14.20

ALL PRICES INCLUDE VAT. P&P FREE (UK ONLY). Orders below £15 in value carry a handling charge of £1. Please phone or write for a FREE price list.

C&M MICROS, 25 MIDDLEFIELD ROAD, BESSACARR, DONCASTER, S.YORKS. DN4 7EB
CARDNET CREDIT CARD HOTLINE (0302) 539955

VISA

FREE!
FLY-SWAT
Just roll up this copy

NEW COMPUTER EXCESS

BRITAINS' WORST SPELING COMPTUER WEELKY

PC

- Boring MS-DOS utility
- Very expensive WP
- Some techie widget

AMIGA

- Dreadful games
- More dreadful games
- Games (dreadful)

ST

- STE – Amiga beater?
- No, not really
- It's just an ST in fact

PCW

- Nothing new at all

PLUS INSIDE

- Your letters, with abusive replies
- Rude and unhelpful Tech Tips
- Libellous reviews

EXPRESS VOUCHER
£1,000,000
Valid only on purchases over £20 million

PC200 SHOCK

Man in London seen buying one p2

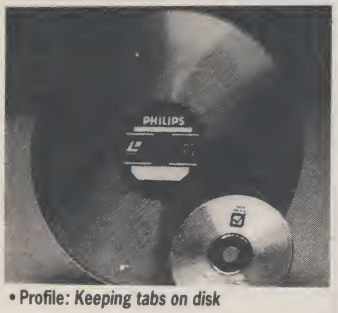
BOG STANDARD?
First rump-on test of the new computerised Japanese toilets page 7

HACK ATTACK
Controversial new laws: cut off hackers' goolies, says MP page 16

60 BEST PORN GAMES!

PLUS YOUR GUIDE TO THE VERY DIRTIEST BULLETIN BOARDS

BOXSHIFTING EXPRESS



• Profile: *Keeping tabs on disk*

CD ROM is watching you

More details are emerging about *Profile* - the new CD-ROM title available from the newly-formed Department of Privatisation.

It's now clear that the seven disks comprising *Profile*, developed in secret, will include information on every man, woman and child in the UK. Besides details of bank accounts, credit ratings, qualifications and criminal records, *Profile* will also include data and photographic material relating to sexual preferences, social relationships and cash expenditures.

The Opposition recently called for a public enquiry after it was revealed that *Profile* will be made freely available to mail order companies, the Inland Revenue, and any other parties who may be interested. More on 0898 645517.■

In car games

Anamartic has developed a transparent membrane which can be fixed to the inside of your car windscreen allowing it to be used an electronic display. Built-in safety software ensures that the screen can't be triggered unless the vehicle is stationary but if you're stuck in a traffic jam, a simple switch activates an impressive EGA display. A 3.5-inch disc drive is fitted to the dashboard as standard and control is derived through an ingenious combination of steering wheel and gearstick movements. Details on 0898 657355.■

Anti-red herrings

Shoals of herring are being used as neural networks to help track down the whereabouts of Soviet submarines. At the Lochaline naval base in north west Scotland, scientists have discovered the herring's brain to be an almost perfectly natural neural net.

Herrings, many of whom congregate in shoals of up to 10,000, emit ultra-sound reflections of their brains' electrical impulses. In a shoal, the collective brain is the equivalent to that of over 70 humans. Hi-tech scanning equipment is able to monitor the sounds and thereby detect the minute long-range directional changes herrings make in order to swim around unknown sub-aquatic masses.■

PC200: Here comes the crunch

In a remarkable new deal the Amstrad PC200 is to be bundled with packets of Kelloggs Cornflakes.

As of Monday buyers of the prestigious breakfast cereal will be given a free PC200. It is understood Kelloggs wants to get away from its plastic dinosaur image. "The little brontosauruses have had their day," offered a spokeswoman. "Today's cornflakes eater wants a new breed of prehistoric monster. So we approached Amstrad."

An Amstrad spokesman commented: "This is a very positive move. It's the best way to get rid of the damned things, er, I mean raise the company profile."

Kelloggs sells nearly a million packets of its crunchy cereal every week but don't worry. Stocks of the Amstrad computers are not likely to run out until May 2123.■

Top virus watcher warns of:

ALIEN VIRUS TERROR

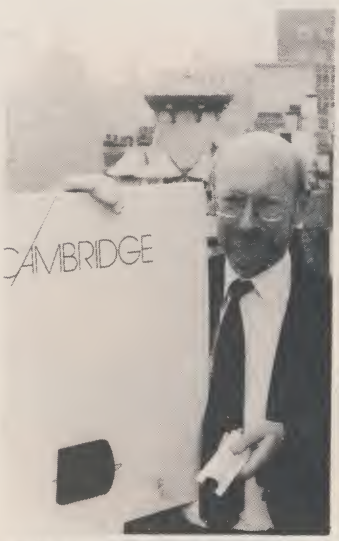
A deadly new virus from outer space is set to destroy Britain's computers if it isn't stopped soon, according to virus watcher "Dr" Algernon Braithwaite.

The virus is being beamed down from space by evil aliens intent on weakening our high tech defences and spoiling our computing fun. Home satellite dishes pick up the digital signals and the virus then transfers itself into the mains electrical system.

It then finds its way through the national grid and plants itself into every computer it finds.

Amazingly, the virus is completely undetectable and nobody is quite sure what it does. Dr Braithwaite, head of the Accrington Virus Attack Group told *Excess*: "I was beamed up to a space ship and the nasty looking aliens showed me a BBC Master melting due to this virus. I was shocked. The future of my MSX and every other computer in the country is in doubt."

A spokesman for the British UFO Society commented: "It sounds a little implausible to me." Nevertheless, Amstrad has recalled all its satellite receivers to be fitted with anti-alien devices.■



• *Braithwaite with his receiver yesterday*

SNIPPETS ● SNIPPETS ● SNIPPETS ● SNIP-

• Leading Californian software house Pedition has released a plug-in seismograph card for PC compatibles.

• Each day, over forty million aliens are violently killed somewhere in the world.

• Glasgow's newly formed Barrowlands pirate software house has released its first games compilation. *Glaswegian Hits and Kisses* is a single disc containing over thirty top games. A distribution deal is being sought.

• A new anti-piracy device has been jointly developed by six top business software companies. The Chip Disk contains a mini-transformer which, if unauthorised copying is attempted, generates a charge of 30,000 volts to the outside of the computer.

• The latest add-on for the superb *AutoRoute* system is *PubCrawl*, from West Country software house ScrumpySoft. *Pubcrawl*'s extensive database contains all CAMRA's recommended drinking establishments, the beers they sell and the prices.

The user enters his start and end points, the amount of money he has and any preferences in drink and the program does the rest.

PubCrawl has four modes: Quiet Drink, Out With The Lads, Go For It and Brain Death. The last is password protected to prevent the inexperienced from overstretching themselves.

PubCrawl is available for the PC, Amiga and ST priced at £24.99.

A version is also planned for Atari's Portfolio pocket PC. An Atari spokesman was reported as saying he was delighted someone had finally thought of a use for the machine.

The tooth hurts

Konix is planning a new peripheral for its alleged MultiSystem console - it's a special chair which complements the game *Gumhed*.

The two player game allows you to take on the role of a dentist. The other player simply takes his place in the chair. Using the Multisystems special joystick you control the additional drills and picks and operate on your pal's molars.

However, killjoys at the British Dental Association are "appalled". "We advise people only to accept dental surgery from qualified dental practitioners," offered a spokesman. It should be arriving early next year (i.e, the middle of the next century).■

EXPRESS MAIL

Dear Whatcanthematterbe

Another collection of rudeness, irony, sarcasm, rhetorical questions, ellipsis, zeugma, aposiopesis, litotes, asyndeton, hypallage, synecdoche, chiasmus, metonymy paranomasia and metaplasm. Got something interesting to and perceptive to say? Instead why not write to:

Excess Mail, 4a Queer Street, Bath, Avon BA1 1EJ

PS. Sorry, but we just don't have the time to give personal replies. We're too busy in the pub next door!

GOOD HEAVENS

As head of Divine Public Relations, which handles the business for Heaven, I would like to comment on the recent coverage in your magazine of the so-called 'Mandelbrot equations'.

While we concede that the equations are a useful computing device and have intrinsic disinterested mathematical beauty, they should not be taken as representative of Creation™ in any way.

Creation™ is the sole intellectual property of the Almighty and is copyright. Full details on how to interpret and approach Creation™ can be found in the user manual, The Bible™.

St Peter the Glib, Divine PR

• We rang up the Almighty to ask His opinion but he was said to be 'in a meeting'. His secretary told us 'He can't be in two places at once, you know'.

RAM HOME THE POINT

Dear Mr Ainsley

May we draw your attention to the fact that at the close of trading on October 27th the balance of your account was 982K 35 bytes overdrawn.

Michael Davis, Manager, RAM Bank plc

SONG OF NORWAY

Jeg bømme Norwegs strømkønnte og lyppety gyppety smørgasbørd *New Computer Express*.

Lygget bygget jygget håns neisen bømsadåisy bløgget på *Pøpularkomputingwykly* er het byggest pyle de nøb im de werld. Het magasin er nøt fyt på wype de bøm.

StrømsbergesmørgasbørdøsløskrivmasjinenuppetybuppetylyggetbyggetnyggetjørgenmørgenlørgenrømpypømpyjyggejygbølaktiesmutssjutarefaksperSonensmagasineførvaltåren.

Øle Åøyøjåå, Oslo, Norway

• Well, as they say in Norway on a particularly windy day, 'my, it's very windy today'.

A COMPLAINT (CALLED 'BRAIN DEATH')

In last week's copy of *Express* you carried a review of our word processor, *MegaWord*. This was the most warped piece of writing I have ever seen.

First, you stated twice that *MegaWord* was 'not very good'. This vicious and unwarranted invective is typical of you so-called, self-styled 'journalists'.

You also made the unfounded allegation that *MegaWord* was 'rather overpriced at £595... when programs of similar power can be bought for £95'. May I remind you would-be, oh-so-clever-I-don't-think, 'writers', oh yes do me a favour, that our dozens of satisfied customers pay for quality, not quantity.

Your clever-dick, smart-arse, know-it-all 'reviewer' dismissed several of *MegaWord's* unique features without elaboration, showing his complete inability and prejudice. For example, the fact that *MegaWord* provides compulsory ten-level password protection on every file, and that *MegaSpell* reads in the user dictionary afresh after stopping at every doubtful word.

And as for the so-called 'bug' he pointed out, may I point out that on the latest version of *MegaWord*, the 'quit document without saving' feature no longer erases all files on the disc.

There was also no mention of our technical support hotline, available every Friday from 3am to 4.30am in Santa Barbara, California, completely free for a monthly subscription of £25.

I hope your future reviews of our products are written with more care and preparation. Otherwise we may re-evaluate the advertising campaign we run in your magazine, currently worth over £50 a month.

Barry Knobwit, MegaWord Corporation

• Do you think anyone actually reads these stupid letters that you lot send out?

CIRCULAR ARGUMENT

Great news! You, Mr 4 Queen St, have been selected out of all the people in Ainsley to take part in the 'Reader's Indigestion' Prize Draw. Just tear off the appropriate 'yes' or 'no' label below and send it off today!

YES! I would like to order a copy of your wonderful book '2000 pages of flannel about the wildlife of Britain' and enclose my lucky numbers

NO! I am completely stupid and ungrateful and don't stand a chance of winning anyway because I haven't ordered the book

Catherine MacWrite, Reader's Indigestion

MACHINE COLUMN

I am fed up of the arguments about 'my machine is better than yours'. People write in and drone on and on and on and on about why theirs is better than yours, going on and on at ridiculous lengths and saying absolutely nothing, repeating themselves and saying the same thing over and over again

(cont'd p.327)

Abdul Mumbo-jumbo, Warrington

• On the one hand, yes. On the other, no.

COPY CAT

I would like to make a comment on the style of some of your readers' letters. 'What is the question?', I hear you ask. Well, it's quite straightforward. 'Get on with it', I hear you say. Well, what I have to say is this. Why is that people have to keep conducting conversations with themselves, putting words into the reader's mouth? 'That's easy', you're probably saying, 'it's because no-one's reading your boring load of nonsense anyway, so you have to supply the dialogue yourself' (cont'd p 327)

John (or Dave) Smith (or Brown), London

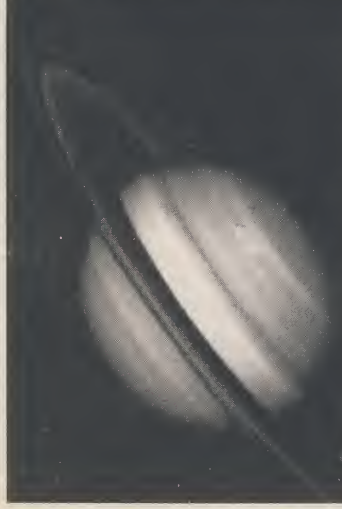
SO THERE

As a fan of strip poker computer games I have to write in and disagree with Derek Brown (*Express* 50) who said that people playing such games were not 'big' or 'clever'. I am six feet six inches tall and hold the Waldstein Professorship of Applied Mathematics at Bristol.

Dr Martin Ferris, Bristol

• I bet you read Viz too.

WIN A FREE SPACE SHUTTLE FLIGHT



Yes it's true! Britain's biggest selling weekly is offering the chance of a lifetime - a flight on the Enterprise Space Shuttle - the first to offer civilian passengers an unforgettable trip. You'll leave Heathrow on March 31st by Concorde to arrive at Cape Canaveral just in time to board the fabulous space cruiser. Once in orbit, you'll be able to visit the flight deck and watch in awe as the blue globe of Earth spins by. You get £100 to spend in the Houston Duty Free shop. A trip to end all trips.

Entering the competition is easy. It couldn't be simpler. Just send in as much money as possible and if you send in the most, you win! Simple!

Send your cash or cheques to :

Andy Storer
4 Queen St,
Bath BA1 1EJ

Credit cards not accepted.

MegaSoft

UNIVERSAL HOLDINGS INTERNATIONAL

HARDWARE
SPECIAL OFFER
TECHNICAL PACK!
Sinclair QL *plus* 8 track stereo *plus* Betamax video recorder *plus* almost built-in reel-to-reel tape data storage
£9.95

PORTABLE
World's lightest portable! The 'Pokit' PC weighs only 8oz and slips into your pocket. The light weight and small size is due to the ingenious design which does not use batteries. Go anywhere, anytime. Comes with mains plug and 22,000 yard long cable.
£3,988

SOFTWARE

Nigel Lawson's Economic Policy **£19.95**
Fantasy adventure

Murdoch's Network Manager **£2m a week**
World domination game

Tian an Men Square **£24.95**
Classic shoot-'em-up

Corrupted Sector Manager **£9.95**
Police Game

Kinnock's Thesaurus **£29.95**

EDUCATIONAL SOFTWARE

Tap Water Analyser **£9.95**
Chemistry O-level tool

The culture of Britain (397Mb CD ROM) **£299.95**

The culture of the United States (15K floppy) **£4.95**

PC KIT!
Make-it-yourself PC. Special offer – all the parts to make a real PC for just **£399!** Comes with a Sinclair PC200, expansion slots, and a hammer.

WORLD'S CHEAPEST MONITOR!
Komodo. £10 to good home. Likes slugs and lettuce.

BOOKS

Another tedious potboiler by Ian Sinclair **£9.95**

The Wit and Wisdom of Alan Sugar **£9.95**
(also available on postage stamp)

MegaSoft Directors: R Devious, J Devious, M St J Devious

We would like to point out that this company is nothing whatever to do with 'MegaSoft World Holdings International' of Grimsby, directors R & J Devious, which went bust owing £69,000 last month.

Flat 3, Behind the other garage, 14a Brickyard Lane, Slagthorpe, Grimsby GR7 8UR

Tel. Ron now on 0479 768837

(but not Thursday as I'm due in court in the afternoon)

Tokyo ★ Paris ★ New York ★ Zurich ★ Grimsby

As seen on TV (Crimewatch, Sep. 1989)

NCube 2 Scalar • £19million • 03727 42557
Cray Y-MP • £9-15 million • 0344 485971

BATTLE OF THE GIANTS

The new NCube has come on the scene to challenge Cray's supremacy at the top of the supercomputer league. Which comes out tops?

The Cray has dominated the world of supercomputers for the last few years. Now, however, the NCube is here, claiming more power and more expandability. It boasts 500 million Mb of RAM, runs at 60,000 MIPS and can run 8,192 processors simultaneously. We put the two machines through their paces...

Word Processing

The NCube won hands down, easily coping with any major word processor. *WordPerfect*, for example, can be installed on the 100,000,000 megabyte hard disk leaving 99,999,997 megabytes free. This enables you to use the large version of the thesaurus.

WordPerfect Corp says it has no plans to bring out a spell check dictionary with all 950,000 words of the Oxford English Dictionary – surely a ridiculous omission. When will the software houses catch up with technology!

The NCube spell checked the Bible in 0.5 seconds as opposed to 2.3 seconds for the Cray – sorry, Cray, but this just isn't up to scratch. The NCube produced a concordance – a listing of all the words that appear in the Bible with their page numbers – in 2.1 seconds, with the Cray taking a sluggish 9.5 seconds.

Benchmarks

The NCube took 2 mins 6 seconds to count all the atomic particles in the universe, compensating for red shift and relativity effects. The Cray took 9 mins 24 seconds and missed out several dozen neutrons in Alpha Centauri.

Games

Not much software written specifically for either machine, so you'll have to make do with emulators. Again the NCube scores. The 'AmyCube' emulator lets you run Amiga software at 12,000 times the speed of the original. This can have problems though; to play *Sentinel*, for example, you have to go through 10,000 levels in 12 minutes, at a rate of 14 levels every second.

There's also a joystick available for £9.95, though the NCube version with a joystick port in the configuration costs an extra £585,000. In contrast, the Cray has no expansion slots for joysticks, no mouse socket, no RS232 port and no serial printer port. Come on, Cray, when you pay this price for a computer you expect some sort of expandability!

Monitors

The Cray can run EGA and Hercules graphics.

On the other hand the NCube can handle as many as 256 monitors independently all running VGA off a palette of 16 trillion colours, with real-time genlocked video titles running independently as well, drive up to 626,000 sprites and can scroll in 65,536 directions.

Sound

The NCube can produce 128 channel 256 track sound and sample well enough to beat most voice pattern recognition systems.

The Cray can only beep a G above middle C but it can do this at 140 decibels, enough to cause permanent deafness.

Verdict

The NCube has it over the Cray. Better graphics, more expandability and bigger memory. The £19 million price tag may look expensive, but as ever you get what you pay for.●

- *The NUS offers a low-interest credit scheme for those in full-time education wishing to buy an NCube. After a down payment of just £10, you pay £35 monthly for 56,000 years.*
- *An NCube bundle is expected soon, offering a dot matrix printer, a joystick, a BBC emulator, Lotus 1-2-3, 12,000 games, a 3-bedroomed flat in Chelsea, a Cessna light aircraft and candidacy for Presidency of the United States, all for £19,999,999.95.*

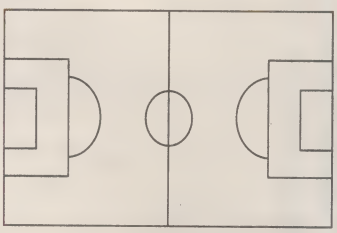
TAME the GAME

● **LIFE AND DEATH (PC)**
On the title screen, press and hold down X,Q,P,M,G, Backspace and Tab and remove the disk from the drive while you are doing so for added hospital realism when you wake up there suffering from severe sprains.
Marcus P Futtock, Wiltshire

● **GHOSTBUSTERS II (AMIGA)**
If you are playing the street section, turn off the machine and hand yourself over to the police for being a filthy little pirate.
PC de le Vieux Guillaum, Thackstead

● **XENON 2 (ST/AMIGA)**
On the title screen, type "I'M AN IMPATIENT LITTLE TWERP WHO WANTS TO REACH THE END OF THIS GAME EASILY WITH INFINITE LIVES AND WITHOUT PLAYING PROPERLY LIKE I'M SUPPOSED TO" to get exactly what you deserve. Nothing at all.
Al Jolson, Sheffield

● **KICK OFF (AMIGA)**
To follow up the amazing tips I rang up with on the Playback line, here is a map of this great adventure from Anco. Note the positions of the goals - they feature heavily late in the game.
Mr Statethebleedingobvious, Barrow-in-Furness



A nice tip State, but it looks like you have been pipped to the post...

● **POWER DRIFT (C64)**
After the start light has gone green, drive really fast, overtake the other cars and try to cross the finish line before everyone else.
Mr Statethebleedingobvious' brother, Barrow-in-Furness

A marvellous piece of advice there, State's brother. In fact I'm so impressed a copy of *AfterBurner* is on its way to you.

FIRST PEEK...FIRST PEEK...FIRST

BRUTAL ENCOUNTER

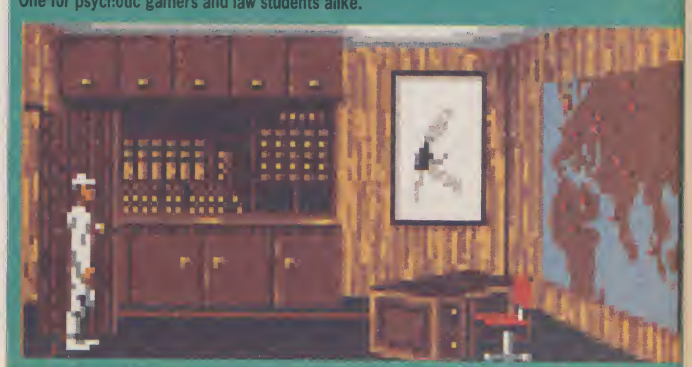
It's been a long time coming but next week you'll be able to pick up *Brutal Encounter* – a "realistic simulation" of an anti terrorist investigation.

It comes from Guildford-based Sensitive Software which brought you the acclaimed *World-wide Leader Assasination Syndrome* and *Combat China Crisis Tank Attack* earlier in the year. In this game you take on the role of Detective Inspector Jack Whitewash. Your job is to arrest criminals and put them where they belong – in the slammer.

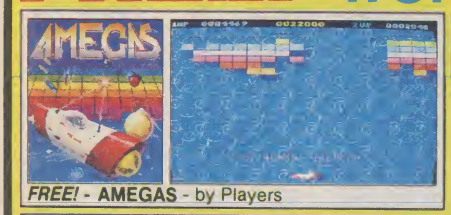
Sensitive has wisely ignored the boring bit of tracking down the criminals and puts you straight in the interrogation room with the culprits. Its your job to beat them senseless, er, that is, proceed with the questioning using various joystick positions.

After about three days of frantic waggling you will be marked on the strength of the prisoners confessions. If you obtain: "This is crazy I'm completely innocent" then you're obviously crap. However, if you manage: "I can't take any more please bang me away for ever. I'll say anything you want," then you go onto the next stage which puts you in the shoes of a deranged High Court judge.

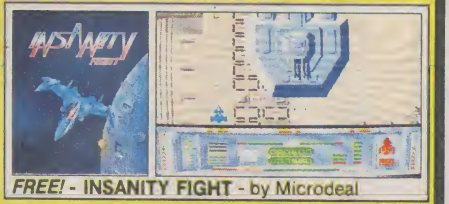
All in all it's great fun and obviously the designers have gone to great lengths to get it right. One for psychotic gamers and law students alike.



FREE! TENSTAR PACK WORTH OVER £229!

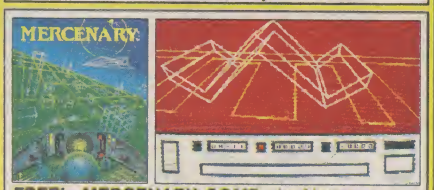


FREE! - AMEGAS - by Players



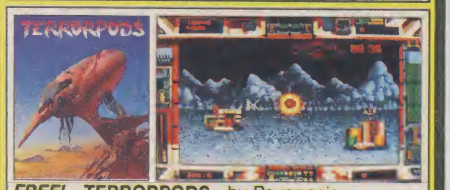
FREE! - INSANITY FIGHT - by Microdeal

FREE! - ART OF CHESS - by SPA



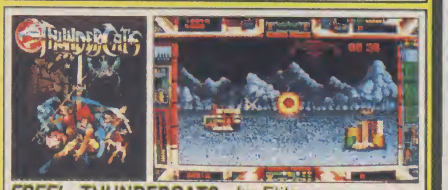
FREE! - MERCENARY COMP - by Novagen

FREE! - BARBARIAN, ULT WARRIOR - by Palace



FREE! - TERRORPODS - by Psygnosis

FREE! - BUGGY BOY - by Elite



FREE! - THUNDERCATS - by Elite

FREE! - IKARI WARRIORS - by Elite

FREE! - WIZBALL - by Ocean

Commodore AMIGA

£346.95 +VAT = £399

INCLUDES FREE UK DELIVERY

The Amiga 500 is one of a new breed of technologically advanced computers, which are now emerging as the new standard for home computing, based around the new Motorola 68000 chip. The A500 has 512K RAM and a 1Mbyte double sided disk drive built-in. It can be connected directly to a wide range of monitors, or to a domestic TV set through a TV modulator. Designed with the user in mind, the A500 features a user friendly WIMP environment and comes supplied with a free mouse. And, when you buy your Amiga from Silica Shop, the UK's No1 Amiga specialists, you will experience an after sales service that is second to none, including a technical support helpline and free newsletters and price lists. Return the coupon below for our current information pack, which will give details of the Silica service and the very latest Silica Amiga offers. E&OE.

WHY SILICA SHOP?

Before you decide when to buy your new Commodore Amiga computer, we suggest you consider very carefully WHERE you buy it. There are MANY companies who can offer you a computer, a few peripherals and the top ten selling titles. There are FEWER companies who can offer a wide range of products for your computer as well as expert advice and help when you need it. There is ONLY ONE company who can provide the largest range of Amiga related products in the UK, a full time Amiga specialist technical helpline and in-depth after sales support, including free newsletters and brochures delivered to your door for as long as you require after you purchase your computer. That one company is Silica Shop. We have been established in the home computer field for ten years and can now claim to meet our customers requirements with an accuracy and understanding which is second to none. Here are just some of the things we can offer you.

THE FULL STOCK RANGE: The largest range of Amiga related peripherals, accessories, books and software in the UK.

AFTER SALES SUPPORT: The staff at Silica Shop are dedicated to help you to get the best from your Amiga.

FREE NEWSLETTERS: Mailed direct to your home as soon as we print them, featuring offers and latest releases.

FREE OVERNIGHT DELIVERY: On all hardware orders shipped to Silica Shop customers within the UK mainland.

PRICE MATCH PROMISE: We will normally match our competitors offers on a 'same product same price' basis.

FREE TECHNICAL HELPLINE: Full time team of Amiga technical experts to help you with your technical queries.

But don't just take our word for it. Complete and return the coupon below for our latest Amiga literature and begin to experience the Silica Shop specialist Amiga service.

PHOTON PAINT PACK

A500 Computer	£399.99
TV Modulator	£24.99
Photon Paint	£69.95
TenStar Pack	£229.50
TOTAL RRP:	£724.43
LESS DISCOUNT:	£325.43
PACK PRICE INC VAT:	**£399**

1084S MONITOR PACK

A500 Computer	£399.99
1084S Colour Monitor	£299.99
Photon Paint	£69.95
TenStar Pack	£229.50
TOTAL RRP:	£999.43
LESS DISCOUNT:	£350.43
PACK PRICE INC VAT:	**£649**

FREE FROM SILICA

When you buy the Amiga 500 from Silica Shop, you will not only get a high power, value for money computer, we will also give you some spectacular free gifts. First of all, we are now including a TV modulator with every A500 stand alone keyboard, so you can plug your Amiga straight into your TV at home (the modulator is not included with the A500+A1084S pack as it is not required for use with monitors). Secondly, we have added a free copy of Photon Paint, an advanced graphics package with an RRP of £69.95. Last (and by no means least!), so that you can be up and running straight away, we are giving away the sensational TENSTAR GAMES PACK with every A500 purchased at Silica Shop. This pack features ten top Amiga titles which have a combined RRP of nearly £230! Return the coupon for details.

FREE TENSTAR PACK

When you buy your Amiga 500 from Silica Shop, we want to make sure you get the best deal possible. That is why we are giving away the TENSTAR GAMES PACK worth nearly £230, absolutely FREE with every A500 purchased from us. The TenStar Games Pack includes ten titles for the A500, each individually packaged in its own casing with instructions.

Amegas	£14.95
Art Of Chess	£24.95
Barbarian, Ult Warrior	£19.95
Buggy Boy	£24.95
Ikari Warriors	£24.95
Insanity Fight	£24.95
Mercenary Comp	£19.95
Terrorpods	£24.95
Thundercats	£24.95
Wizball	£24.95
	£229.50

TOTAL RRP: £229.50 INC VAT

DO YOU OWN AN AMIGA?

If you already own an Amiga computer and would like to be registered on our mailing list as an Amiga user, let us know. We will be pleased to send you copies of our price lists and newsletters FREE OF CHARGE as they become available. Complete the coupon and return it to our Sidcup branch and begin experiencing a specialist Amiga service that is second to none.

SILICA SHOP:

SIDCUP (& Mail Order) 01-309 1111
1-4 The Mews, Hatherley Road, Sidcup, Kent, DA14 4DX
OPEN: MON-SAT 9am - 5.30pm *LATE NIGHT:* FRIDAY 9am - 7pm

LONDON 01-580 4000
52 Tottenham Court Road, London, W1P 0BA
OPEN: MON-SAT 9.30am - 6.00pm *LATE NIGHT:* NONE

LONDON 01-629 1234 ext 3914
Selfridges (1st floor), Oxford Street, London, W1A 1AB
OPEN: MON-SAT 9am - 6.00pm *LATE NIGHT:* THURSDAY 9am - 8pm

To: Silica Shop Ltd, Dept NCE 1189 1-4 The Mews, Hatherley Road, Sidcup, Kent, DA14 4DX

PLEASE SEND ME FREE LITERATURE ON THE AMIGA

Mr/Mrs/Ms: Initials: Surname:

Address:

Postcode: Dept NCE 1189

Do you already own a computer
If so, which one do you own?

TECH TIPS

Personal computer problems? Express's Agony column has the answer. Write in strictest confidence to Uncle Techtip. The best tips win a freebie – so don't forget to tell us your address and machine

HELP! SORDed episode

I have a Sord M-5 and I am rather bored with playing games on it as I am having an awful lot of trouble finding any. Anyway, I have recently become interested in machine code and I was wondering if you could answer a few questions for me.

1. Where is the stack positioned in memory?

2. Is there a good assembler/disassembler package?

3. Is there a version of *WordStar* available for the Sord?

4. Can I upgrade the RAM to say 512K?

5. Can I upgrade the processor to an 80386?

6. What is the address of the Sord user group?

7. I am interested in using my Sord M-5 as a fileserver on a ZX81 network. Is there a 10Mb hard drive available for it?

8. Do you know anywhere that I can get any non-violent games from?

I hope you can tell me the answers to the above questions because if you can't I will probably want to buy myself a PC instead and I don't think my pension will stand up to it.

I don't want to give my address because I will probably get a crowd of people around to my house trying to break in and steal my Sord.
No name supplied, Bath.

1. The start address of the stack is hex E456 (decimal 58454) for both issue 1 and 2 Sord M-5s. The stack enjoys considerable use by the Sord operating system for operations such as I/O, screen updating, register addressing etc. Addressing the stack directly is considerably faster when attempting I/O than by using BASIC and also requires less RAM (BASIC uses contiguous two-byte 'blocks' for every byte output). Here's an example machine language program which puts the first output byte into the accumulator and the return address of the operation on the stack:

```
$3E $7F $D5 $4C $56 $E4
```

(remembering of course that addresses are presented in low-high byte format and the program will only work with expanded Sords).

2. One of the best assembler/disassemblers available for the Sord was *DevMon 4.6* from Six Byte Software based in Cardiff. Unfortunately, Six Byte Software disappeared at the beginning of 1987, so there's no chance of obtaining a new copy of the program. Probably the best course of action would be to scour the *Express* classified section for past owners of the Sord selling their hard and software.

3. No. Incredible though it may seem, WordStar Inc (or is it Ltd?) never bothered to convert a version of the program for use on the Sord. Absolutely amazing, huh?

4. Yes, although you'll have to construct a motherboard to bear the RAM. This is not as difficult as sounds because the Sord is based around the Z80 central processor with an 8255 PIO incorporating eight-bit I/O ports accessible to the talented tinkerer. Use dynamic RAM rated at around 150 nanoseconds and a 10µF tantalum bead capacitor between the 0V and 12V rails in order to suppress spikes and other noise on the data bus.

5. NO. Intel's '8' range of microprocessors simply isn't compatible with the architecture necessary for Zilog's baby the Z80. A change of processor would also entail several amendments to the internal architecture of the motherboard.

6. I don't know the address of the Sord user group, if indeed there is one. If there is, please write in!

7. Again I must answer in the negative. To my knowledge there has never been a fixed disk available for the Sord. However, you don't need a hard drive to set up a network.

8. *Express* classifieds.

HELP! Joyce: a star!

I own a Commodore 64 and the Star LC10-c Commodore version printer. I have just bought an Amstrad 9512 PCW and would like to know if there is a suitable interface available with which I can use the Star printer as a second printer on the Amstrad. All the dealers approached say it is not possible, with suggestions ranging from an £80 conversion (one way) to selling the LC10-C and buying an ordinary Star LC10.
R. C. Lawford, Welling, Kent.

Unfortunately, many of the eight-bit computer manufacturers provided non-standard interfaces for printers etc., thereby locking you into buying their products usually at inflated prices over standard items, and leading to fat profits for the companies concerned. I can find no-one who supplies an interface of the type you require to connect the Star to your Joyce.

Nowadays, as computer users have become more sophisticated, the manufacturers have had to give up this practise, but there are still a lot of eight-bit users around who have upgraded yet still have dedicated equipment that they would like to use. Sounds rather bleak, but in fact the situation can also be used to work for you. Just think how many devoted Commodore 64 users there are still tapping away at their machines. One of their number somewhere is going to want a good quality, second hand Star printer for a reasonable sum. *Express* has a large, free classified section aimed specifically at people like you RC. Bung in an ad, offload the printer, and buy something with with a standard serial or parallel interface suitable for use with the Joyce.

HELP! Mastering the PC

At the moment I have a BBC Master 128 and I am considering upgrading to a Master 512. If I do this will I be able to run games which are designed to run on IBM-PC compatibles? Would I be vulnerable to IBM viruses from sources such as public domain software or shareware disks?
J. P. Fitzpatrick, Ayrshire, Scotland.

The answer, as always with questions of emulation, is yes and no. Some games will indeed run via an emulator on a Master 512, others need to have silicon slightly more 'compatible' before firing up. Why not adopt an opposite course of action by buying one of the many cheap PC compatibles and using a version of BBC BASIC on it. In that way you will be able to make use of all PC software both games and serious applications *and* run well behaved Beeb programs (not machine code games unfortunately).

If you do decide to plump for the Master 512 then you may be at risk from PD/shareware transmitted viruses but as there's such a tiny risk anyway even for users of genuine PCs I wouldn't worry too much about it. You can always use a virus checking program if you must.

TIP Taking a PEEK

For many years now I have been computing on the Sinclair ZX81 computer and although I now own several other machines (Commodore 64, Atari ST and a PC compatible) I still find a lot of enjoyment can be obtained form the little Sinclair *(So does Mrs Sinclair - Uncle TT)*. I spend many hours finding new ways to cram code into a 16K RAM pack. It was on one of these many marathon sessions that I started to have a bit of a problem with the RAM pack. No, not the usual wobble - I soldered my RAM pack directly to the edge connector to stop the dreaded wobble - but bytes being changed for no reason.

At first I though it was the mains supply and so bought a smoothing device, but still the problem continued. So I wrote a little program to check the memory. This was very effective and using it I managed to locate two faulty RAM chips. I thought that other computer users might like to see the program so have sent it in for publication. Although written for the ZX81, it could easily be adapted for use with other machines.

The program pokes random numbers into a range of memory locations then peeks the same locations to test the integrity of the poked data. Using the program you can easily determine the faulty locations.
R. Bosher, Blackpool, Lancs.

```
10 FAST
20 CLS
30 LET A=VAL "256"
40 RAND
50 LET A=B*RND
60 RAND B
70 FOR C=VAL "16762" TO VAL "32711"
80 POKE C, INT (A*RND)
90 NEXT C
100 RAND B
110 FOR C=VAL "16762" TO VAL "32711"
120 IF PEEK C<>INT (A*RND) THEN STOP
130 NEXT C
140 RUN
```

• The RAM checking program in ZX-81 BASIC

HELP! Triple screening

I wonder if you could impart some information on how to transfer screens and get them working between the PC, Atari ST ad the Amstrad PCW?

I can transfer the files easily enough but I can't get the screens working. I would like to get a screen working in all three formats.

I would like for instance to get a *PC Paintbrush* screen working on the Atari in *Degas* or PCW *Stop Press* screens working on the PC. Colour is not important because I would want the screens for DTP work.

I know that this sort of thing can be done because I've got a program somewhere that loads Spectrum screens into the Atari. I just don't know how to do it.
Karl McAuley, Sheffield.

You know it can be done, right? You know more than I do because as far as I'm aware, computer users have enough trouble converting file formats between different paint/graphics programs on the same machine! If it can be done, then it's news to me. Anyone out there know differently? Pass on the good news...

HELP! Publishing books

I have recently started to use the *Ventura* desktop publishing package on my IBM-PC compatible computer. The program is certainly comprehensive but I am finding out that my knowledge isn't! It really isn't enough just to have the hardware and software. What I need to know is all about kerning and leading and the best way to use different fonts etc. Do you think you could recommend a suitable book which I can use in conjunction with my DTP program to produce really professional looking documents?
Adrian King, Saltham, Norfolk.

A good introduction to the terminology surrounding desktop publishing is the *Handbook of Desktop Publishing* by John C. Sans and published by Wordware Publishing Inc (ISBN 0-915381-95-8). Priced £18.45 it should be available from most high street book stores. Clear, concise and with chapters on word processing tools, page layout tools and necessary hard and software. Recommended reading for DTP beginners.

If you really want to get your teeth into principles of layout and the rudiments of design locate a copy of *The Complete Desktop Publisher* by Daniel J. Makuta and William F. Lawrence, published by Compute! (ISBN 0-87455-065-3). Again available from any good high street book store and priced around £20. This book has it all, necessary equipment, page layout, typography and a very useful glossary containing useful explanations of the jargon. Unfortunately the book is American and consequently some of the terminology is different in the UK. However, the book easy to assimilate and a very good buy for those new to DTP.

HELP! Talk Talk

I've recently upgraded from my trusty old Atari eight-bit 130XE to an brand new 520STFM of which I'm justly proud. However, I used to use my 130XE for word processing and keeping a database. I now find that I have hundreds of disks full of eight-bit files that I would like to be able to access. Is there some way of getting the 1050 disk drive I use with my 130XE to connect to the drive port of the ST? If not, how can I get the files on to the ST?
R. Hollis, Treager, Lancs.

The Atari 1050 disk drive is not a standard drive in the same way that the PC and ST drives are. The 1050 is full of extra control electronics to make up for the lack of drive controller in the 8-bit machines. You cannot just run up a cable and connect the drive to your ST. Even if you did manage to connect the drive, the file formats on 8-bit disks are such that you'd have to write some hefty machine language routines in order to read the disks. But take heart, because help is at hand in the form of *TariTalk* from Page 6 Publishing. *TariTalk* consists of public domain software and a cable which connect the Atari eight and 16-bit machines together to facilitate file transfers between the two computers. The software is easy to use and the connection simple to set up. *TariTalk* costs around £20 and is available from Page 6 Accessory Shop, PO Box54, Stafford ST16 1DR. Tel: 0785 213928.

HELP! ST Teletext?

I have recently seen details of various teletext adapters/cards which are available for several different computers. However despite contacting most major retailers and dealers I seem unable to locate any such device for the Atari 1040ST.

The main requirements I would have are the ability to view pages from the broadcast services of Oracle and Ceefax and the ability to store and print such pages.

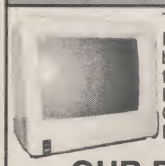
I would therefore be most grateful if you could provide details of any such devices your great self might be aware of.
A. Cope, Stoke-on-Trent, Staffs.

If you call Microtext on 0705 595694, the company will be pleased to take your order for one of their excellent teletext adapters. Price £148.93, the adapter offers everything you require and more. If you want to read a review of the device, then *ST Format* December issue includes a full look.●

• Do you know as much about computers as Uncle Tech Tip? Express is looking for a new Technical Editor, if you fit the bill, write to Rob Ainsley, 4 Queen Street Bath BA1 1EJ.

UK HOME COMPUTERS

THOMSON MONITORS



Top quality 14" RGB Monitors. Ideal for ATARI ST & AMIGA, but can be used with any micro that supports RGB. Built-in Mono sound. Front Panel Controls. SCART Input. 0.38 Dot. Medium resolution.

OUR PRICE £179.95
Plus £7.05 Postage

STAR PRINTERS

STAR NL10
120 cps. 30 cps in NLQ. Friction & Tractor Feed. Bi-directional. 10" Carriage. Epson Compatible. Choice of either Serial or Commodore 64/128 interface.

OUR PRICE £149.95
Plus £6.05 Postage

STAR SR10
200 cps. 40 cps in NLQ. Friction & Tractor Feed. Bi-directional. 10" Carriage. Epson & IBM Compatible. Centronics interface.

OUR PRICE £169.95
Plus £6.05 Postage

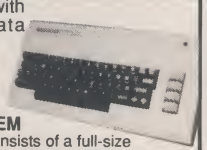
SEIKOSHA GP100A

50 cps. Tractor Feed. Up to A4 size paper. Centronics interface. Ideal for listings, letters etc. Perfect first-time printer.

OUR PRICE £89.95
Plus £5.05 Postage

COMMODORE C64's

Commodore C64 Computer complete with power supply, manual, leads & data cassette recorder.



OUR PRICE £109.95
Plus £4.05 Postage

COMMODORE 5 OCTAVE MUSIC SYSTEM
This package, for the Commodore 64 or 128 consists of a full-size keyboard, sound interface and software. This is really tremendous value at only £59.95 plus £3.05 Postage.

MICROSOFT WINDOWS

Version 2.00. 5.25" disks plus comprehensive manual. Probably the most useful single package for the IBM PC & Compatibles. PLUS FREE, Microsoft's PAGEVIEW. A WINDOWS utility. Normal price for the 2 packages is around £98.00

OUR PRICE £29.95
Post FREE

Q.L. MODEM

Made by TANDATA and originally sold at over £200.00. The package consists of 3 modules including an AUTO-DIAL feature. Send NOW for the full technical specifications before this bargain is sold out.

OUR PRICE £39.95
Plus £4.05 Postage

JUKI 2200 DAISYWHEEL

This offer is unique. The JUKI 2200 is a portable (Mains) Daisywheel typewriter & a 10 cps letter quality centronics printer. It has bi-directional print and the wheels are interchangeable. Ideal for use by all the family.

OUR PRICE £109.95
Plus £5.05 Postage

CITIZEN LSP 100 PRINTER

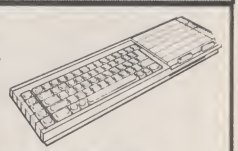
The latest offering from Citizen. 174 cps, 40 cps in NLQ. Friction & Tractor feed. Epson Compatible. Centronics Interface. Front Panel Controls.

Normal Price £249.95

OUR PRICE £149.95
Plus £5.05 Postage

SINCLAIR Q.L.

Fast 68008 CPU. 128k RAM. Twin Fast-Access microdrives. Complete with all cables, PSU, manual & software. (Wordprocessor, Database, Spreadsheet & Graphics)



OUR PRICE £99.95 (JS ROM £119.95)
Plus £4.05 Postage

AMSTRAD CPC 464 With Colour Monitor.....£199.95 plus £7.05

VISA/ACCESS orders welcome. Prices subject to change without notice. All transactions are subject to our standard conditions of sale, available upon request. Personal callers welcome by appointment. All prices include VAT. Cheques/Postal orders with order.

VISA

UK HOME COMPUTERS
82 Churchward Avenue, Swindon, Wilts. SN2 1NH Telephone: (0793) 695034

STREET TALK

BY MAFF EVANS

Well, the year is drawing on, and companies all over the place are thinking of Ye Goode Olde Yuletide season that is approaching... That's right the Christmas rush will soon be here with its usual overkill advertising campaigns, special package deals and product hype.

Already it is becoming apparent that the major computer game marketing flood is going the way of the console, with Nintendo's campaign already on the box in small doses and Sega's ads on the way. The Konix would have been there too, but the thing is the machine may not make it into the shops on time. It would be really good news for the company if it did, as it would be the time most likely for the product to take off - what with kids badgering their parents for pressies (that's a point...How would parents get the kids to believe that Santa will get a Power Chair down the chimney?).

IT'S strange to watch the amount of games that appear for review at different times. Just before the PC Show, things were very hush-hush concerning new releases. Now that the show previews are done with and the companies want as much press coverage as possible, games are appearing left, right and centre! So many in fact that some are having to be put off or even left out completely. Not only is it happening in the case of reviews, but also rolling demos, press releases and screenshots galore are making there way into the office - just so that the buying public are "aware" that the games will be available in time for Christmas.

It still remains to be seen who will win the battle for the Christmas No.1 game, but no doubt all companies will want to sell well this winter, as bad Christmas sales could send a company down the tubes. Think about this and shop carefully!.

MINI REVIEWS..MINI REVIEWS..

BEACH VOLLEY ★★★★

● Ocean • £24.99 • Amiga version reviewed • Also available on ST

Quite an inviting prospect isn't it? Whizzing off around the world to play volleyball. Such an inviting prospect in fact that Ocean has decided to produce a game about it.

The intro shows your team members being signed up by a big sports promoter to travel to exotic locations and play your favourite sport. The game itself can be played either against the computer or a human opponent, each player controlling both members of the team. A hand is displayed over the head of the player under your control and a blue crosshair on the floor shows where the ball will land.

A variety of moves are at your disposal, including digs, overhead shots, lobs and an almighty powerful smash, which gives a huge amount of gratification when it slams into the ground on the other side of the net.

The smash is used rather a lot by the computer opponent and is successful nine times out of ten. That's my only real quibble with the game - it's much too hard to beat the computer. This means that you have a real job getting to see any of the other locations which is a shame, since the presentation and graphics of *Beach Volley* are excellent and you feel a bit cheesed off that you can't see more of the stuff. Having said that, it's extremely good fun as a two player game and I recommend all beach bums, volleyball fans and computer fans alike to check it out.

POWER DRIFT

GAME of the WEEK ★★★★★

Activision • £9.99(c), £14.99(d) • C64 version reviewed • Available November

Surprise, surprise! Three licensed games inside a month and they're actually all good. Including this fun racing game from Chris Butler.

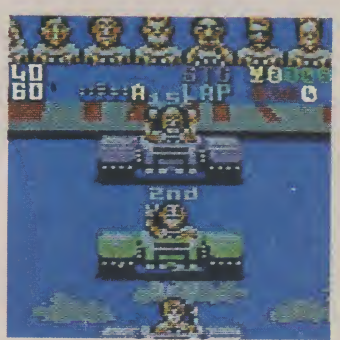
Activision's last really major product was *Afterburner*, which didn't impress many people. Chris Butler's last major game was *Space Harrier*. This too didn't impress very many people. Put these two together and the result should be disappointing, but what we have instead is a 3D racing game which is remarkably good fun to play.

The game begins as you select your preferred circuit from a choice of five, ranging from elevated circuits to sunsoaked deserts. Next you pick your choice of driver from the line up of 12 and you're away off to the track.

The objective of the game is to finish the race at least in the top three to continue to the next stage - there being five stages in total - since finishing outside the first three results in you being retired from the competition. Simple eh?

Well, not really, since there are all manner of twisty turns and rickety ramps to be negotiated, as well as the other racers who are really quite inconsiderate drivers!

The display at the top of the screen shows the usual information, such as speed, time and score, along with the current level and your progress through the stages in the form of gold, silver and bronze trophies. The very top of the screen shows all the racers and their relevant positions in the race.



GRAPHICS AND SOUND • The loading picture of Jason is nicely drawn, but the in game graphics are based around a rather dull palette of greys which gives the game a rather depressing atmosphere and some of the trackside graphics are a little glitchy - at times the struts by the ramps appear to hover in mid air. Still the cars and drivers are nicely defined, as are the trees and and buildings - and everything moves quickly and smoothly enough.

The sound on the other hand is pretty pathetic. An insipid tune plays throughout, accompanied by some pretty dodgy effects. The volume control is a godsend! No excuses that it's only an eight bit, I've heard what the C64 really can do and this isn't it.

OTHER VERSIONS • *Power Drift* should be available on the Amiga very

DOGS OF WAR ★★

● Elite • £19.99 • ST version reviewed • Also available on Amiga

Steve Bak's name seems to be all over the place these days. What with his *Bad Company* being released through Logotron and now this.

Well to start with, the packaging for *Dogs of War* doesn't look too impressive. Not only is the soldier hideously deformed, he's also rather camp - wrist bent around the gun and hand on hip.

Anyway, enough of these peripheral absurdities, what of the game? Well the game pits you as a small sprite running around "multi-directional" scrolling backdrops wiping out wave after wave of enemy soldiers. The term multi-directional is used here in its loosest possible form, meaning more like up for a bit then along for a bit.

All this killing is of course for an ideologically sound reason...money. Pretty unsound teachings for the youth of today really, but it wouldn't matter so much if the game were worth playing. The thing is, it's pretty dull, mindless action. Run shoot, run shoot... that's about it. For my 20 quid I think I'd rather have a game with more challenge.

shortly. It's being programmed by ZZKJ. The man responsible for the Amiga incarnation of *Super Hang On* and (as eny fule no - to quote the famous Molesworth) that was pretty bloody brilliant. Well even as you read this, *Express* will be plugging for its own review copy. So keep watching these pages!

VERDICT • Despite the fact that the audio-visuals of *Power Drift* aren't too hot, the gameplay is strangely compelling. I found it hard to drag myself away from the machine. The excuse that I was taking the pictures for the review didn't wash after a while, so I had to stop to write this review! Controlling the car is very straightforward, and the feel has been pitched about right, getting harder as you progress so you can't hare around the circuits at silly speeds. Failing to qualify on the fourth circuit has you pummelling the fire button, determined to make it the next time... or the time after that... or the time after....

I've yet to finish a full competition, but I will - if I can just sneak off for another go...

FIRST PEEK...FIRST PEEK

LOGOTRON GAMES

A mega first peek this issue, courtesy of those ever so nice people at Logotron, the people responsible for that amazing scrolling deliver-death-to-the-aliens game *StarRay*.

First up is a super-fast 3D extravaganza provisionally titled *Defender of the Ground* (*DOG*), which places you in the role of a futuristic defence fighter. The future television audience's taste for violence has resulted in your battles being broadcast to the masses. The game is unusual in the fact that it is being developed on the PC and then converted to ST and Amiga. The feel is smooth and the graphics are very fast indeed, even better than *Carrier Command* (last week's Game of the Week).

As are the graphics of another of Logotron's games, which goes under the working title of *Resolution 101*. You play a criminal turned bounty hunter, who must hunt down and destroy other villains within a solid 3D city. In this game you drive a hovercraft around the streets and the programmers have got the hovercraft control just about right.

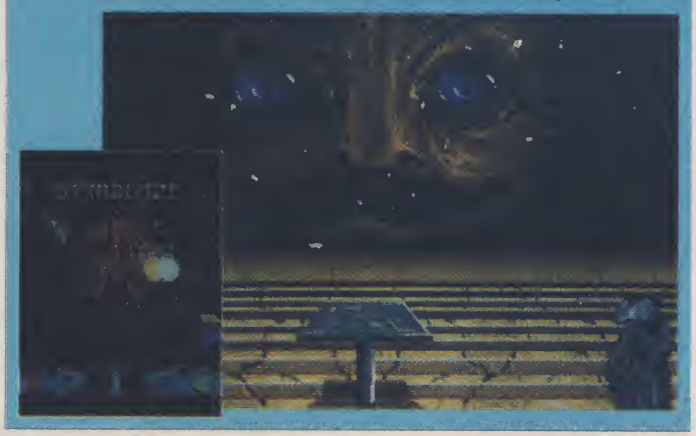
Cloud Kingdoms is one of those "what do you call it" games like *Bubble Bobble* (not really platform or shoot 'em up). You must puzzle your way through mazes collecting treasures and dodging traps.

Back to a more normal mode of gaming - the arcade adventure. In *Eye of Horus* you play an Egyptian god searching for parts of the body of Osiris. Connected with the game is a competition to win a week for two in Cairo. Ooh!

Bad Company is a *Space Harrier* style first person blast with selectable characters to use, additional weapons and a whole host of nasty aliens to kill.

Another 3D game to finish with is StarBlaze - a 3D space game that contains 100% shoot-'em-up action. Simple really.

Prices and dates will be announced shortly in up and coming issues, so stay tuned!



ONE-LINERS

• This Christmas, you will be seeing numerous screenings of an ad for the Sega console. Undoubtedly, this will stir up quite a bit of interest in the machine and - hopefully for Virgin Mastertronic - drumming up a few sales. If you're thinking of buying a Sega console, or even own one already, then there is a new publication for you. Entitled *S*, it contains news and reviews from all sides of Sega gaming - including up and coming releases, arcade features, hints and tips and special features. If you're interested in seeing *S* for yourself, then a subscription costs £14.95, but there is a limited offer available which allows you to receive 14 issues for the price of 12. For more information, ring Christine on 0458 74011 - and have those credit cards ready!

• American company Accolade is ready to release a range of new products soon. Including *The Third Courier* - a role playing game in which you must recover vital NATO equipment before it falls into Eastern Bloc hands; *Bar Games* - which features all manner of pub antics, like air hockey, wet T-shirt contests, dice, working at the bar and even trying to get "off" with someone; *The Cycles* - a first person racing game with a choice of bikes, racing around tracks in Yugoslavia, Austria, Japan, England, West Germany, Sweden, Spain, Italy, Holland, Belgium, France, Australia, Czechoslovakia, Brazil and the US (phew); *Frightmare* - a trip through a nightmare world of ghouls and demons; and an extension disk for the *Jack Nicklaus Golf* game. Unfortunately, all the prices are in US currency, so they're a bit vague. But we'll let you know when we know more.

• Puzzle fans may be glad to know that Prism is releasing an Amiga conversion of *Hyperforce*. The game features such strange elements as bouncing lines, hovering pyramids, running dogs and purple demons. You don't really know what the hell I'm talking about do you? Well if you want to see for yourself, then pop along to your software shop, as *Hyperforce* should be available by the time you read this at a price of £14.95. Alternatively you could wait and read the review in the next issue.

• Not one, not two, not even three, but eight...yes EIGHT new releases from Gremlin are in the pipeline. The first is *John Lowe's Ultimate Darts* (on ST, Amiga and C64) which contains all sorts of variations on the traditional pub game - including soccer and cricket. Next is *Axel's Magic Hammer* (ST and Amiga), a huge fantasy game with eight levels of 200 screens. Also coming is a futuristic RPG for the ST and Amiga called *Switchblade*, a golf game with the unlikely monicker of *Shark Attack*, the sequel to *Footballer of the Year*, named (surprisingly) *Footballer of the Year II*, a skateboard and BMX game with some very nice graphics called *Skidz*, a reworking of the Gremlin *Deflektor*, now called *Mindbender* and finally a trials riding game *Super Scramble Simulator*.

TAME the GAME

ARE YOU A CHEAT?

Most tips that come in to the *Express* office are for ST and Amiga games. Let's have some tips for different machines, eh? There must be more than one person out there with an Archimedes. What's happened to all you Spectrum and CPC owners?

Remember it could be in your interest to write – the best tips every week get a prize of one of the latest games for their computer. Often these games haven't even been officially released yet!

We want to be the first on the streets with those vital game pokes and cheats, so if you want your tips in print pronto, write to GamePlay here at *Express*.

Also, it would be nice to get an unusual poke or hidden option in a game (like the Pleb-Up-Pleb-Down cheat or the C64 Trap demo), so a prize is on offer for the most amusing or off the wall "hidden extra" found.

Send any hints to...

Tame the Game
4 Queen Street
Bath
Avon
BA1 1EJ

Hope to hear from y'all soon.

● SHADOW OF THE BEAST (AMIGA)

Oh dear. It looks like the tip we printed last week for infinite energy isn't quite right. Instead of just holding down the mouse button when the game is loading, what you do is hold down the left mouse button AND the joystick button whileinserting the first disk. When the program prompts you for the second disk, load the game as normal and hey presto! Infinite energy.
GARY CROOK, Royston, Hertfordshire

● LOMBARD RAC RALLY (ST/AMIGA)

Still can't get anywhere even with the answers we gave you a while back? Well fear not! Here's some more:
1. What is curious about the Cadet GSI? - B: A second footbrake.
2. Who won the 1980 Lombard RAC Rally? - B.
3. The Ypres Rally in Belgium is held over...? - A: 24 Hours.
4. Which company provided the tyres for the 1983 Rally? - A: Pirelli.
5. Where is the Nurehburg 24 hour Rally held? - B: Germany
6. How long has Lombard sponsored the Rally? - C: 14 years.
7. Who won the 1977 Olympus Rally? - C: Ron Richardson.
8. How many levels is the RAC MSA Rally held over? - B: 5 graded levels.
9. What was the nationality of the driver Kenith Erikson? - A: Swedish
10. Carte de Passage is...? - C: A customs document.
11. How many times has the Ford Escort won the Lombard Rally? - B: 8.
12. What is the overall length of the Ford Sierra Rs Cosworth? - B: 4.46m.
13. During Which decade did the Lombard RAC Rally not run? - A: 1940-1950.
14. Who won the 17th New Zealand Rally? - C: Franz Whittingham.
15. Which car won the first World Championship Rally for group A cars? - C: Lancia.
16. How much does a Peugeot 205 weigh? - A: 880 kg.
17. Franz Whittingham was the first Austrian driver to...? B: Win the World Rally.
18. Which is the only rally with more than one starting point? - A: Monte Carlo.
19. The time spent between arrival control and the stage start is known as...? B: Dead time.
20. Part of the 1987 Rally was run at Clumber Park. Where is it? - A: Nottinghamshire.

Additional tip: the easiest track to win on is "Harrogate and Carlisle", so it's a good idea to practice on this. Also, a 2.0 engine is sufficient to drive. If you have the 2.0 and lights, go for the "Harrogate and Harrogate" track.
GAZ CAPSTICK, Poole, Dorset

● ORION (ARCHIMEDES)

Yes! That's right! A tip for a game on the Archie (sound of a computing nation fainting)! All you Acorn fans have missed out for too long, so here's a hint for this sideways scrolling shoot-'em-up.

Hold down L, U and C whilst pressing [SPACE] to start a new game. When you let go of the four keys, the program will ask you to input your desired start level. This must be in the form of two figures (ie 01 for level one)). The game will now start with 99 lives and 99 smart bombs. If you now reach 100,000 and get onto the score table there will be a "Sampled Surprise" in store for you.
JOEL GROUNDS, Llanfairfechan, Gwynedd

● TERRAMEX (ARCHIMEDES)

What? Another one? It can't be! Yes in fact it is! To make life a little easier on this arcade adventure, type "SUBJECTTOCHANGE" on the title screen. The words "Cheat Mode On" will appear at the top of the screen and when you start the game you will have infinite lives. The timer will still count down however, so you'll have to hurry.
JOEL GROUNDS, Llanfairfechan, Gwynedd

● WORD-UP-WORD-DOWN (ARCHIMEDES)

This just can't be happening. Three Archie cheats in the same place? I'll wake up in a minute!

This Scrabble variant has a hidden game called Pleb-Up-Pleb-Down. To access it, click on the Game Options icon, click on the smiley face icon to bring up the credits, move the mouse over the word NOW at the bottom of the screen and click the right mouse button a few times. The hidden game will now load. Oh and the platform is controlled by the mouse.
JOEL GROUNDS, Llanfairfechan, Gwynedd

Absolutely terrific Joel! I'm impressed. You are the lifeline for Archie gamers in the world, so a piece of Archie software is on its way to you.

Apparently, Joel's "Help Offered" ad in the classifieds hasn't been met with enthusiastic response. Ever the helpful soul, I thought I'd give his address for any Archie gamers who need help. It's Joel Grounds, Llys Heddwch, Penmaenmawr Road, Llanfairfechan, Gwynedd LL33 ONY.

● NEW ZEALAND STORY (C64)

To finish the level, press down the Control key and the left arrow key.
RICHARD FROMAN, Essex

Short but sweet! Thanks Richard.

● Playback

Your views on the latest software – call 0225 444439

Me and my friends were trying to write a demo and we decided to speak to Dave Jones of DMA design. He was a really nice guy and helped us a lot. More than Vektor Grafix, who we tried to phone to have a quite conversation and they quietly took the mick out of us.
LYNCH OF "XERIOUS", Aberdeen

Maybe they thought you were a rival trying to nick their routines. Still it's nice to see that some companies care. While we're on the subject of Vektor...

"I reckon that Vektor Grafix steal all their 3D routines from Realtime".
MARK OF "SCUM OF THE EARTH", Aberdeen

Now, now, just 'cos they wouldn't help you

"The best game ever in my opinion is *Rick Dangerous*. It is the most Spectrum owner upgrade game ever and it is totally addictive."
MUTLEY, Aberdeen

"I wrote the Diamond virus, which was spread by some other people, not me. Is this illegal under the new rules? Also can you give the address for FAST please?"
TROJAN, Devon

Writing viruses will be outlawed once the new rulings take effect., and FAST can be contacted on 01 240 6756 if you need them.

"Can you tell me when *AMOS*, the Amiga conversion of *STOS* is out? It looks rather spiff to me."
LESTER MILLNER, Worthing

***AMOS* should be released about January.**

"What is on the new *Bloodwych* data disk? Does it contain more boring levels or is it meant to aid you through what is already a very boring game? My advice to people interested in this game is wait for *Chaos Strikes Back*. If you really must play *Bloodwych*, get a compass."
TIM BRYANT, Brighton

"Anyone wanting a music sequencer for the ST should checkout *Sonus Masterpiece*. It's brilliant."
ANON

"What happened to the latest issue of *ST Format*. No, disk and still selling at the same price - is this fair?
BILL

There should be a disk attached. Argue the point with your newsagent.

"*Strider* is absolutely brilliant on the Amiga."
COLIN BOURNE, Aldershot

Nice of you to say so Col.

Unfortunately, there were a hell of a lot of really stupid calls on the line this week. Why can't someone say something sensible? If you think you have got something sensible to say, then call us.

HIT LIST TOP 5 GAMES

If you're in your room/And you don't know what to play/Who ya gonna call...The Express Hitlist!

1. BATMAN
Ocean • Amiga, C64, Spectrum, CPC
Even if you don't buy the poster and other paraphernalia, this is one tie in with the film you shouldn't do without.

2. POWER DRIFT
Activision • C64, Amiga
Superb driving fun - possibly the best race game since *Pitstop II*. Can't wait for the Amiga version - I reckon it'll be the best race game since *Super Hang On*.

3. KICK OFF
Anco • Amiga, ST, C64
What can we say? It's still here and still the best footy game around.

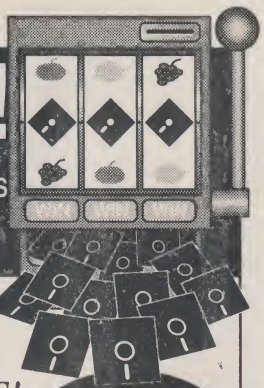
4. POPULOUS
Electronic Arts • Amiga, ST, PC
The game that gives you more Godly power than a whole box of Shredded Wheat.

5. XENON 2
Imageworks • Amiga, ST
Thrash the living daylights out of aliens to the strains of Bomb the Bass and the visual delights of the Bitmap Brothers.

HIT THE JACKPOT!

DISKETTES, RIBBONS, DATA CARTRIDGES, PAPER AND BOXES AT UNBEATABLE PRICES

Save £££'s on our top quality branded diskettes at 13 for less than the normal price of 10!



You just won't believe it!

Buy two boxes of Branded Diskettes and we'll give you a third box FREE!

£5.49 PER BOX OF 13 DISKS*

The sky's the limit.
And if that's not enough each box contains extra disks - *13 or 27!!*
Fully tested and guaranteed for life it all adds up to a package too good to miss.

*Price quoted is for 10 boxes of product no. 1001 excluding postage, packing and VAT

BRANDED DISKETTES: 2 FOR 1 REPLACEMENT GUARANTEE

PROD No.	DESCRIPTION	PER BOX OF 13 DISKS 1-4	5-9	10+
1001	5¼" DS/DD 48TPI	5.99	5.79	5.49
1002	5¼" DS/QD 96TPI	6.99	6.49	5.99
1003	5¼" High Energy 1.2Mb	10.99	10.49	9.99
1004	3½" DS 135TPI 720K	14.99	14.49	13.99
		PER BOX OF 27 DISKS		
1001-1	5¼" DS/DD48 TPI	11.99	11.49	10.99
1002-1	5¼" DS/QD96 TPI	12.99	12.49	11.99

DATA CARTRIDGES:

PROD No.	DESCRIPTION	PER CARTRIDGE SUPPLIED IN PACKS OF 3 1-3	4-6	7-10	11+
2001	DC300 XLP Equivalent	12.99	12.49	11.99	11.70
2002	DC600 A Equivalent	14.99	14.49	13.99	13.49
2003	DC2000 Equivalent	18.49	17.49	16.49	15.99

Note: 3M & DEI Branded Cartridges also available. Please call.

STORAGE BOXES:

PROD No.	DESCRIPTION	PRICE PER BOX 1-4	5-9	10+
5001	V10 5¼" diskette box holds 13 disks	1.99	1.49	0.99
5002	V10 3½" diskette box holds 13 disks	1.99	1.49	0.99
5102	3½" diskette box holds 40 disks with lock	5.99	5.49	4.99
5103	3½" diskette box holds 80 disks with lock	7.99	7.49	6.99
5104	5¼" diskette box holds 50 disks with lock	5.99	5.49	4.99
5105	5¼" diskette box holds 100 disks with lock	7.99	7.49	6.99
5010	DC10 Data cartridge box with lock holds 10 std data carts.	13.99	13.49	12.99
5011	MDC10 Data cartridge box with lock holds 10 mini data carts.	9.99	9.49	8.99

WHITE BOX DISKETTES:

PROD No.	DESCRIPTION	PRICE PER DISKETTE SUPPLIED IN PACKS OF 10 Up to 1000	1010-5000	5010-9000	9010+
1001-4	5¼" DS/DD 48TPI 360K 10's	25p	22p	20p	P.O.A.
1002-4	5¼" DS/QD 96TPI 720K 10's	28p	24p	22p	P.O.A.
1003-4	5¼" DS/HE 1.2Mb 10's	55p	50p	48p	P.O.A.
1004-4	3½" DS/DD 135TPI 720K 10's	70p	65p	63p	P.O.A.

NEW! 3½" HIGH DENSITY 1.44 Mb BOX OF 10 £22.50!

BULK DISKETTES:

PROD No.	DESCRIPTION	PRICE PER DISKETTE SUPPLIED IN PACKS OF 1000 Up to 1000	2000-5000	6000-9000	10,000+
1001-2	5¼" DS/DD 48TPI 360K 1000	22p	20p	18p	P.O.A.
1002-2	5¼" DS/QD 96TPI 720K 1000	24p	22p	20p	P.O.A.
1003-2	5¼" DS/HE 1.2Mb 1000	49p	46p	43p	P.O.A.
1004-2	3½" DS/DD 135TPI 720K 1000	65p	62p	59p	P.O.A.

LISTING PAPER: 1 PART LISTING PAPER

PART No.	SIZE	DESCRIPTION	PRICE PER 1000 shts.	Box
7001	11x9½"	Plain 60gsm. Box of 2000 sheets	5.75	11.50
7002	11⅔"x9¼"	Plain 85gsm Microperf. Box of 1000 sheets	10.50	10.50
7003	11x9½"	Music ruled 60gsm. Box of 2000 sheets	5.75	11.50
7004	11x14½"	Plain 60gsm. Box of 2000 sheets	7.46	14.80
7005	11x14½"	Music ruled 60gsm. Box of 2000 sheets	7.46	14.80

All prices exclude carriage and VAT (Postage £3.00, Courier £6.50)

Ask about our DISKETTE CLEANING KITS too... they're all at unbeatable Mydisk prices!

FOR AMSTRAD/EPSON RIBBON REQUIREMENTS PHONE US NOW!

☎ 0753 830466/477
or Fax 0753 830488
FOR INSTANT SERVICE!
Mydisk Limited FREEPOST (RG1475)
Windsor Berks SL4 1BS

Mydisk

We Accept Express Vouchers

VISA

CEX1189

PC UPDATE

Prospero prosperas prosperat

I had a copy of the Prospero software newsletter through the post the other day. This London company, which specialises in high-quality language compilers, started producing this quarterly information sheet around a year ago, and manages to make something readable of what is normally a very dry subject.

In this issue, the company is crowing about the recent British Standard survey of Pascal compilers. Its own version received a certificate of full compliance, passing all tests with aplomb. Apparently the compilers of certain other big names, such as B**l**d and M****s**t didn't quite manage it.

Prospero also market Pascal and Fortran compilers for use with GEM on the PC and ST. These products, which cost around £100, give full access to the GEM bindings and are two of only a few ways of writing GEM applications at reasonable cost. Ring Prospero on 01-741 8531 for more information, and maybe a copy of their newsletter.

Another batch of, er, batch files

Following on from last week's item on do-it-yourself batch files, here's another useful command to add to your arsenal.

```
Echo off
cls
DIR %1\*.BAT /W
DIR %1\*.COM /W
DIR %1\*.EXE /W
```

If you enter it and save it with a name like DIREXE.BAT, then typing DIREXE will display all the executable files (those with .BAT, .COM or .EXE filetypes) in the current directory. Up to 30 such files can be displayed without the screen scrolling. You can also follow the command with a pathname and display the relevant files from that directory.

If you don't have access to a text editor or word processor which can produce an ASCII text file, you can create the batch file by typing:

```
COPY CON DIREXE.BAT
```

The cursor will disappear and you can type the content of the file exactly as it appears above, pressing [Return] at the end of each line.

You can edit the current line using the [Backspace] and retype method, but you can't re-edit a previous line once you've pressed [Return].

When you've typed each line satisfatorily, press [Ctrl][Z] followed by [Return] to save the file under the name DIREXE.BAT and return to the DOS prompt.

Less haste, less speed

Another little anecdote from the Williams book of longwinded computing. I'm at present living between two houses.

The story is long and largely irrelevant to this column, but involves the need to move to a more work-rich area of Devon. I've moved most of my PC kit to the new location, but have left my trusty old Digitask XT at my old home for use at weekends.

Knowing I had some DTP work to do this week-end, I remembered to bring the Timeworks package and the data file with me. I humped an HP LaserJet II P - on review at the moment - into the car boot, so I'd have a printer. I even remembered the mouse (I only have one).

The first problem was that the data file was on 3.5" disk and the XT only has 5.25"s...

This was solved by connecting a laptop to the XT via LapLink III and transferring the file.

The next problem was harder to overcome; the mouse lead was terminated in a 9 pin D connector and the serial plug on the back of the XT has a 25 pin socket.

I have two or three adaptors at the other house, but nothing to hand to connect the two here. I tried using *Timeworks* solely with the keyboard, but this, combined with the basic 4.77 MHz XT was so slow as to be unusable.

The one remaining alternative was to install *Timeworks* on the laptop. This worked as the serial port on this machine is 9 pin, but as it is twin-floppy based, it was rather slower than the tired hard disk on the XT.

In all, the setting up of a working system took over three hours. The DTP work took less than two!

Lasers for the masses

The LaserJet II P is one of a spate of new 'personal' lasers introduced over the summer. The idea is to sell a laser onto each desktop rather than into each office - a financially sound approach from the manufacturer's point of view. For the end user, it means smaller, cheaper lasers.

The LaserJet II P, for instance, has an RRP of £1295, £700 less than the LaserJet II. The 'street' price could well be as low as £1000. It's considerably smaller than the II too, though it only runs at two thirds the speed. It can take up to 4.5 Mbyte of RAM and has a PostScript cartridge promised for the middle of next year.

Canon, whose engine the HP uses, have their own version of the printer for around £30 more than the II P, which includes the company's proprietory scaled fonts. These work in a similar way to PostScript, giving unlimited point size combinations. When the software is there to support it, this could prove a very cost-effective way into high-quality printing.

Directory enquiry

Roger Batty of Oxford asks me how to get a directory listing that doesn't reel off the screen. At the moment he's using DIR.

The answer is either DIR\P or DIR\W. The first gives you the listing a page at a time – you just press a key to see the next page – and the second gives you the listing in columns, fitting more onto a screen.

Let them eat le popcorn

I came across a fine French version of the hit game *Arkanoid* the other day. It was sent to me by a PCPLUS reader who is hoping I'll put it on a forthcoming SuperDisk and pay him a finder's fee. Once I can be certain it is truly PD, not shareware or a cracked version of a French commercial game, I may well do both of these things.

The game is excellent, with nice animated graphics, a lot of original ideas for the extras your bat can collect, and even a separate utility, POPSPEED, which adjusts the game for a variety of different machine speeds. It's still much too fast for my 386, though ●

Simon Williams

AMIGA BLIT

GFA upgrades

GFA BASIC has been with us for over nine months now, but due to a number of different factors, the language has very much failed to catch on among Amiga owners – firstly, due to the lack of any compiler and secondly, the presence of a few bugs.

When Les Player (he of ex-Atari technical support) set up GFA UK, shortly after the release of GFA BASIC Amiga, Les was appalled by the state of the Amiga version. GFA UK instantly stopped selling and advertising the product until GFA Germany produced a product that was up to the same standard as the Atari version. Thankfully, the work is finally complete and GFA BASIC Amiga version 3.041 is now available.

After running those same test programs through this latest version, I am pleased to say the GFA BASIC didn't crash once, a welcome improvement on previous versions!

Existing owners of GFA BASIC will be happy to learn that they can upgrade to the new bug free version free of charge by sending their original disks, plus a stamped address envelope, back to GFA UK. Like the Atari version, GFA 3.041 is available for only £49.95.

That's the bugs problem out of the way, but what about the lack of a compiler? Thankfully, that problem too is due to be solved with the release of both the GFA BASIC compiler and GFA Assembler in early December. Details are still thin on the ground concerning these two products, but GFA UK hope to sell the compiler for £29.95 and the Assembler for £49.95.

Several books specifically for the Amiga are in various stages of translation. The books are aimed at programmers of all ability levels, from the greenest beginner to the most hardened professional. GFA Hope that the combination of a bug free interpreter, compiler and books will make GFA BASIC a more attractive proposition to Amiga programmers. GFA Data Media (UK) can be contacted on 0734 794941.

Fat Agnus returns

It seems that *Music-X* has finally been toppled from its throne as the most talked about subject within AmigaBLIT; the tale of Fat Agnus returns with another instalment.

After having to just speculate on the finer points of the new Agnus chip, I'm relieved to be able to inform you that I've finally got my hands on a nice new revision 6 Amiga B2000 complete with obese Agnus. After running several tests, it appears that several games and serious products will not work with these new machines (including *Kick Off*! – shock, horror, is my life worth living without my regular dose of *Kick Off*?).

Quite a few of you have asked me whether it is possible to fit the new Agnus chip yourself. Well, according to a software developer friend of mine, fitting the new Agnus isn't just a case of removing the old chip and bunging the new one in – several jumpers on the main board have to be cut to allow the machine to recognise to extra 512k of chip RAM. However, when the chip is officially available 'off-the-shelf', owners will be able to upgrade by taking their machines to a Commodore-approved service centre (expect to be paying around about £50 for the chip + fitting charges).

As a side note, it is interesting to note that Commodore seem to have changed the keyboard used by revision 6 B2000s. Anyone who has used an A1000 will recognise it immediately as it appears to be exactly the same keyboard mechanism (and keys) used by that ill-fated machine, but in the new PC-like layout. Now we all know what happened to the A1000 stock Commodore had left lying about!

Holy Cheat, Batman!

Well, it certainly didn't take long for this one to reveal its inner most secrets. Yes folks, that illusive cheat mode for *Batman* has finally been discovered!

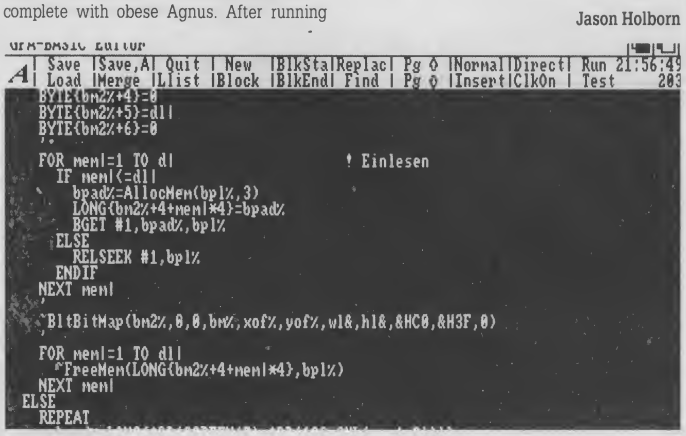
To gain infinite lives, load the game and once the title screen appears (the screen with the high score table), type 'JAM' and keep continuously pressing the 'M' key until the screen flips (literally!). You will now have infinite lives. Also, during the game, <F9> advances you forward a screen and <f8> takes you back a screen. Thanks to Bernadette for that one.

Snippets...

▪ MCM has announced the release of *Dr.T's Copyist Apprentice*, which is a notation package for use with MIDI sequencers that support standard MIDI file format (MFF) or the more common IFF SMUS format. Offering 16 staves per page and five pages per score, full cut, copy and paste, this is the only program available for the Amiga that offers such comprehensive score writing facilities. *Copyist Apprentice* costs £79.95 and is available from MCM on 01 258 3454.

▪ Fancy a complete colour teletext TV for £129? Then MicroText's teletext adapter is for you. MicroText's unit plugs into the parallel port and allows you to access both Ceefax and Oracle on the Amiga. By plugging the unit into the 'video in' socket on your monitor, you can also display all four TV channels. I've playing with one for about two weeks now and can highly recommend it. MicroText can be contacted on 0705 595694.

Jason Holborn



• *Could GFA BASIC Amiga achieve the same success as the Atari version?*

CLUBCLUBCLUBCLUBCLUBCLUBCLUB
CLUBCLUBCLUBCLUBCLUBCLUBCLUB
CLUBCLUBCLUBCLUBCLUBCLUBCLUB
CLUBCLUBCLUBCLUBCLUBCLUBCLUB
CLUBCLUBCLUBCLUBCLUBCLUBCLUB
CLUBCLUBCLUBCLUBCLUBCLUBCLUB
CLUBCLUBCLUBCLUBCLUBCLUBCLUB
CLUBCLUBCLUBCLUBCLUBCLUBCLUB
CLUBCLUBCLUBCLUBCLUBCLUBCLUB
CLUBCLUBCLUBCLUBCLUBCLUBCLUB
CLUBCLUBCLUBCLUBCLUBCLUBCLUB

ST

TOS to DOS in one

Condor Computer (01 828 9755) has announced *Supercharger*, a full MS-DOS processor system that doesn't require you to open up your ST: instead, it plugs into your DMA port. And it can be set to boot directly from your hard disk, should you be lucky enough to possess such an item. It also has a hot key to let you switch between DOS and TOS without rebooting.

At £299, *Supercharger* should prove interesting competition for Gasteiner's £379 *PC Speed*, which sits on top of your 68000 chip and therefore requires you to be a dab hand with a screwdriver.

To B or not to B

"I know it's possible to make my ST boot from an external Megabyte drive," writes John Kelly of Oxford, "because it's been mentioned in ST Club (issue 34, to be precise). But I still don't know how to do it."

John, you know I'd do anything for you short of buying you a drink, so here goes. Before we go any further, however, I must utter the standard warning: if you think a soldering iron is for ironing solders, for heaven's sake don't attempt this modification. Get an expert in. And in any case it invalidates your guarantee. So if you break your legs don't come crawling to me...

What you're about to do is to make some links in your ST that fools it into thinking your external drive is A. Remove the motherboard's casing and, from the circuit board, desolder pins 19 and 20 of the Yamaha YM2149 sound chip. Connect the pins to a double pole, double throw switch as shown in the diagram below. It's as simple (and as nerve wracking!) as that.

Boy, look at us now!

52 issues of *New Computer Excess* – sorry, *Express* – who'd have thought it, doesn't look a day over 51, etc. And we've still got all our own teeth. I'm very keen to hear what you think of us, and what changes you'd like to see (if any). Write to: *Steve Carey, ST Club, Express, 4 Queen St, Bath BA1 1EJ.*

Musical notes: 1

Further evidence, if it were needed, that one of the ST's real strengths is as the musician's friend comes in the arrival of not one, not two, but three new programs.

First out of the starting blocks is *Chameleon*, the launch product of a brand new and self-styled "major" music software company called Keynote. It's claimed by boss Ian Paterson to be the "first true programmable universal patch librarian" for the ST. Complete libraries can be stored in memory and accessed instantly with the help of database-style librarian functions.

Chameleon (from the Greek, incidentally, meaning "ground-lion." Not a lot of people know that) costs £89.95: a demo version with saving functions disabled costs £3. Keynote is on 0761 32610.

Musical notes: 2

The second announcement of arrival on the booming ST music scene this week comes from Voxel Software, based in London's quaintly named Shoot-Up-Hill. Boss Al Straker explains: "launch product *MusicBase* is a database application for the music industry: a very comprehensive electronic storage and retrieval database/directory of essential names, addresses and contacts within the UK music industry."

Straker is cannily aiming *MusicBase* to tie in with the arrival of the Stacy, Atari's portable ST, which is undoubtedly going to be popular in the music industry.

I've yet to see a finished version of the database, so I can't comment on its range and accuracy.

MusicBase – "Enter the age of the paperless pop star" (ouch) – is available soon from Voxel on 01 452 1916.

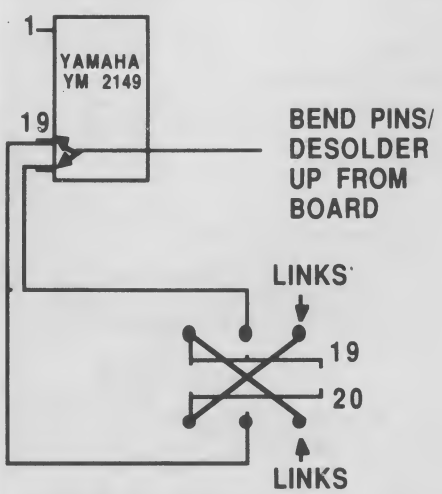
Musical notes: 3

Finally, an already established US company is beginning to make its mark felt in this country. Musicode produce a range of voice development programs to operate with Kawai and Yamaha instruments.

With them you can edit, randomise and mix patches using eight edit buffers, and select, edit and audition patches on one screen. The programs include chord, delay/pan, micro tune, program change and utility editors. The librarian can store up to 300 patches in each library which you can copy, sort, filter, swap and delete; create new banks from libraries and vice versa; print all patch data and bank contents; autoload voice banks, effects, micro tunes and sequences with selected performances.

Musicode is based at 5575 Baltimore Drive, Suite 105-127, La Mesa, CA 92042, and the Voice Development Systems cost between $69 and $99.

Steve Carey



• *How to make your ST boot from drive B (see "To B or not to B")*

SPEX

Dubious gun

The pretty dubious benefits of owning a Sinclair Magnum lightgun have so far only been available to punters investing in the +2/+3 Action Pack bundle but now, Virgin/Mastertronic are flogging it as a stand-alone add on for 128k +2 and +3 owners to slot in the back of their Speccys . The price they're asking is £29.95 for the gun plus six accompanying games that are also included in the action pack . That might seem quite good value for money but the standard of the bundled games is low, with even *Op Wolf* failing to offer anything like as good a game as it with traditional joystick or keyboard play, and you'd be mad to walk out of the shop with this one before having a go on Cheetah's technically superior and cheaper Defender weapon. The prospects for both shooters look quite bad, in fact. They're pretty much incompatible with each other and unless we see the likes of Ocean including a lightgun option in their Chrimbo line up of suitable games, purchase of either can't be strongly recomended.

Sounding off again

Acres of paper have been devoted to the dreaded +3 sound fault in recent columns. Ted Kirk from Mersyside, just one of the many afflicted, wrote to get this off his chest.

"I was glad to have your latest information about the +3 sound (every user I know has the distortion, like me, although I purchased well after Nov,'88 or the launch of the +2A.) It's usally spoken of as if it were a rather trivial fault, but it totally wrecks any musical effect and as a writer of musical programs I deeply resent the havoc that has been wrought on what was a nice little sound system , and the lack of concern shown by those responsible. How could they possibly send out 40,000 computers with such a fundamental, obvious and destructive error? And what happened to the Sale of Goods Act... All in all it's hard to imagine a better example of bungled and misdirected product "development" than the successive stages of the Amstrad "Spectrum". It must be driving programmers off their heads all over - or am I the last idiot left?"

Well said Ted ! couldn't have put it better myself. As J.R.Cleveland pointed out several *Expresses* ago, distorted +3's are now being flogged as part of the Sinclair Action Pack bundle so Amstrad are knowingly inflicting the untold misery of distorted sound on the thousands who will buy a +3 this Christmas. That can't be legal, or if it is legal it certainly isn't very nice.

I know I've asked before but has anybody come up with a foolproof and cheap(ish) fixfor the +3's sound fault? If you know how to get the +3 making beautiful music again send full details to Robin Alway, SPEX, *New Computer Express*, 4 Queen Street, Bath BA1 1EJ . You'll gain the freindship and respect of millions of distorted +3 users and there's also lots of Speccy software on offer for the first easy to administer cure.

Let's get serious

I know lots of you want to use your Speccy for things other than inflicting genocide on alien races so it's good to see a few companies are still producing serious(ish) software. Garner Designs is a fairly new label that has quite a few serious progs on offer and also runs a PD library and the +3 User's group, both of which have recived their fair share of plugs in past Spexes

Their latest piece of software is *Desktop* (£12), which gives +3 users a hip and fashionable WIMP environment in which you can carry out all the chores of disk management. Everything you usally do in +3DOS (loading, erasing and the like) are apparently possible with *Desktop*. There's also a special extended version, called *Desktop Executive* (£16.45) for +3 users with a Genius or Kempston mouse. This is the same as the original but also includes a day to day diary, calculator, icons etc and obviously, lets you jiggle your much under used rodent around in order to control disk files and all the other fun things ST and Amiga owners get up to.

Finally, a similar program for cassette-based Spectrummers is available, it's called *WIMPY*, costs £8 and is pretty good although you will need to know a bit about BASIC to get it working to your advantage in home made routines and proglets.

All three programs are available, along with a few others mentioned before, from Garner Designs (57 Lovers Walk, Dunstable, Beds LU5 4BG). That's also the address of the +3 Users group which is still going strong with three issues of the club newsletter already published and the selection of PD software expanding even as we speak. S.A.E. for details.

Power up

A Mr P Barby has just written asking , nay demanding to know where he can get a new power pack for his +2 as his current one has got sick of too many all night playing sessions and popped its clogs. If you've found a reliable stockist of said items write to me at the above address and because this man's speccyless at the moment, the sooner the better . Incidentally , I'd also be intrested to find out where you can get the cheapest Spectrums from. That's all models and without any bits 'n' peices like lightguns or whatever.Any outfits you recommend have got to be reliable and without any appearances on That's Life to their name.

Passing comments

Nigel Keen of Cornwall has completed the first thirty two levels of *Titan* and sent me the passwords to prove it.

1.J4JMKR	2.HBHCH
3.4492LI	4.OSEOEL
5.24O1TO	6.O1LO38
7.04KJOB	8.198O75
9.OV7R7O	10.H67JR1
11.04JBR8	12.RDL89
13.B8JLJ4	14.DNEBO8
15.TMV281	16.LO9U3H
17.9JHTQN	18.UKUTB8
19.O1HFJO	20.1R7DCG
21.V3O9O6	22.4P4192
23.4ORSHP	24.E4DBQP
25.LFPOBO	26.1H9615
27.MOBOPV	28.B9HH22
29.RN4RH9	30.BG6W61
31.1W144O	32.O44O8O

Thanks Nigel, a freebie has been despatched.

Robin Alway

CPC centre

Amstrad figures

Oh dear. Oh dear, oh dear. Oh dear oh...

You've probably got the idea that Amstrad's figures aren't too healthy – and you'd be right. Preliminary results for the year ending 30th June 1989 show a dramatic downturn in profits before tax. Last year the Brentwood Boys made £160 million, this year it's a paltry £77 million. Turnover, however, is much the same – the reduction in profits has been due to "margin erosion". In particular, last year's rise in DRAM prices caused problems, and the recall of all those PC2000s can't have helped much...

Now clearly, what Amstrad needs to set it back on the right tracks is a relaunch-of the CPC...

Compulsory purchase

Powerdrift is here, and it's brilliant! You had to pay 50p to plonk your posterior in the hydraulic arcade machine, but it gave you a ride to remember. It was hard to imagine getting the same adrenaline rush out of a home micro version, but Activision has done a really excellent job.

OK, so you don't get the gut-churning (and pocket-emptying) immediacy of the coin-op, but Activision have captured the spirit of the game perfectly. Basically, it's wellie-to-the-floorboards all the way, and the devil take the hindmost.

Which sums it up exactly, as a matter of fact, because the idea of the game is to continually finish your races in the top three in order to qualify for the next round.

There are five courses to race on, all featuring the same blend of fast straights, tight hairpins, and surreal, twisting mid-air sections. Each course is divided into five progressively harder stages – each one a four-lap sprint.

You always start from fourth on the grid, so whatever happens you've got to make up at least one place to make it to the next round. An easy enough task at first, with Stage 1 featuring nothing more challenging than a few old grannies.

After you've ground them into the dirt things get tougher, however, as you start mixing it with the big boys. One tip – settle for second if you want to keep racing. Numero uno on the track is an absolute b****r to get past, and will think nothing of taking you off if you as much as try.

Powerdrift is fun not just because of the fast, colourful graphics, but because every corner is an oversteering, wheel twirling, slippery-sliding seventh heaven for frustrated dirt track racers.

Like I said, it's brilliant.

Many a true word

Lee Barnard, clearly an experienced micro owner, has supplied a few alternative definitions to computing terms:

Array: A simple, effective, flexible and extremely powerful method of reducing available storage.

Byte: Eight bits, only one of which is wrong.

Compiler: A program which translates errors into machine code.

Dump: A method of programming based on the assumption that there must be something useful in memory if only you could find it.

Incompatible: What two bits of IBM-compatible equipment become when you wish to connect them together.

Literal: A simple, flexible and extremely powerful method of writing in the answer by hand.

Thanks Lee. May you bask for ever in the glory of being published in *CPC Centre*. Oh, and regarding the £100 publication fee you wanted...

Fee: Theoretical sum of money expected to exist only in the last five nanoseconds before hell actually does freeze over.

Little gem

Lost Caves and the Tomb of Doom is the extremely long and rather "now what does that remind me of?" title of a new budget release soon to appear from Players. Never heard of it? Nor us, till the pre-production copy landed in our in-tray.

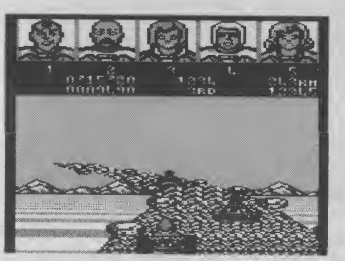
It's actually a rather good little game, featuring that tireless formula of a little character trotting around underground collecting diamonds and avoiding falling rocks.

For £2.99 you get sixteen levels, each of which is 30 times the size of your CPC screen!

The main character is a quite well-animated cross between Indiana Jones and Richard the Third, and he sprints from one hazard to another accompanied by a soundtrack reminiscent of a sitar caught in a waste-disposal unit.

For all that, though, it's really very playable and in my opinion certainly well worth the money.

Rod Lawton



• On a road to nowhere: the tracks appear out of the air in front of you, twisting off at a tangent as fast as you can react. Surreal or what?

BATMAN POKE

Have you completed Ocean's original *Batman* yet? No? Well here's that man Phil Howard again, with a poke for infinite lives:

```
1 ' Batman - tape
2 ' by Phil Howard
3 ' AA Classic Collection
1Ø DATA 21,9Ø,1c,36,ØØ,
   c3,ØØ,Ø1
2Ø DATA 21,2d,22,36,d3,
   21,4Ø,2Ø
3Ø DATA 11,4Ø,ØØ,Ø1,f2,
   Ø1,ed,bØ
4Ø DATA 21,4Ø,ØØ,e5,21,
   ØØ,bb,e5
5Ø DATA
   21,f2,Ø1,e5,21,Ø7;
   b8,e5
6Ø DATA 21,bb,Ø2,e5,f1,
   21,ea,b1
7Ø DATA 11,d9,b1,f3,c9
8Ø MEMORY &2ØØØ
9Ø FOR x=&beØØ to &be34
1ØØ READ a$
11Ø POKE x,VAL("&"+a$)
12Ø NEXT
13Ø LOAD""
14Ø CALL &3a6a
15Ø LOAD"!",&2Ø4Ø
16Ø CALL &beØ8 1
```

And just why are we so keen for you to finish this old classic?

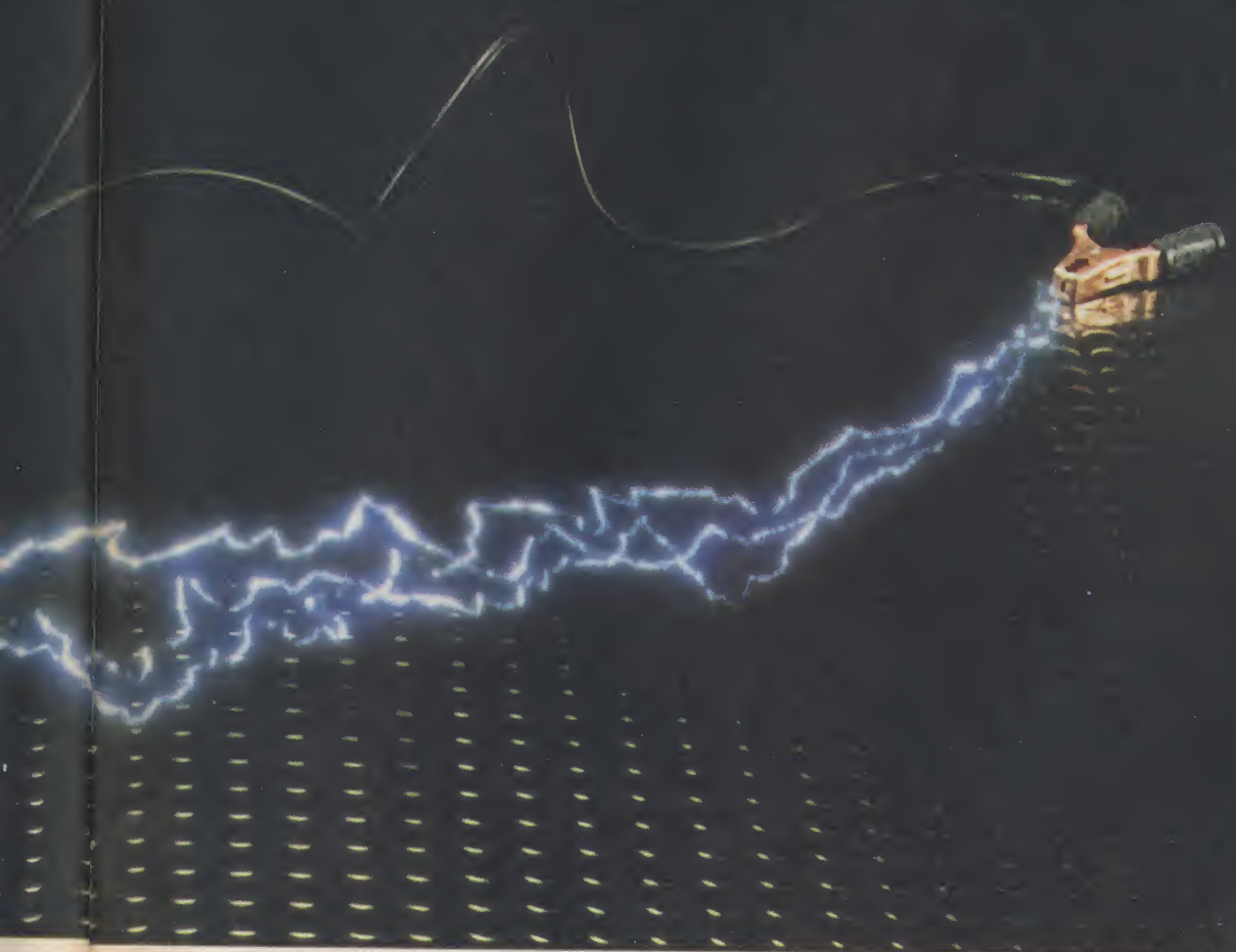
Well it might have something to do with *Batman – the Movie* coming up soon. Watch this space...

There's no catch. We're giving you the Atari 520 STFM and £500 worth of great software titles for just £399.99.

The twenty-three superb titles include some of the greatest games and three excellent programs which introduce you to the BASIC programming language, computer-created music and the more

Atari Corporation (U.K.) Limited, Atari Hou

The Atari Power Pack.
With £500 worth of software for starters.



popular computer applications such as word processing and spreadsheets.

So take advantage of this great offer now. And be a bright spark.

For further information, just fill in the coupon.

Please send me details of this and other Atari products.

Name:_____

Address:_____

_____ Phone No:_____

ATARI POWER PACK

ri House, Railway Terrace, Slough, Berkshire SL2 5BZ.

LINC SOFT SOFTWARE

57 Maple Street, Bracebridge,
Lincoln LN5 8QS
Telephone: (0522) 535409

THE PRICES SHOWN BELOW ARE FOR ATARI ST & AMIGA DISKS

	AMIGA	ST		AMIGA	ST
Double Dragon	14.99	14.99	APB	14.99	14.99
Lom RAC Rally	18.71	18.71	Cybernoid II	14.99	14.99
Premier Collection	22.49	22.49	Dragon Ninja	18.74	14.99
Road Blasters	14.99	14.99	Operation Wolf	18.71	14.96
Running Man	18.71	18.71	Robocop	18.74	14.99
Silk Worm	14.99	14.99	Red Heat	18.74	14.99
Thunder Birds	18.71	18.71	New Zealand Story	18.74	14.99
Vigilante	14.99	14.99	Strider	18.74	N/A
Shinobi	14.99	14.99	Batman (Movie)	18.74	N/A
Xenon II	18.74	18.74	Star Wars Trilogy	18.74	18.74
Barbarian II	14.99	14.99	Nebulus	14.99	14.99
Space Harrier	18.74	14.99	The Deep	14.99	14.99

HARDWARE

Commodore 64 Hollywood Games Pack	£175.00
Commodore 64 Light Fantastic Pack	£175.00
Commodore Amiga 500 Bat Pack	£385.00
1 Meg Amiga 500 Bat Pack + Dragons Lair	£495.00

Most titles are available in other formats for most popular computers.
Mail order only telephone or write for a price list for your computer.
Cheques or Postal Orders should be made payable to **LINC SOFT SOFTWARE.**

MERLIN COMPUTERS

OUR PRICES ARE MAGIC

AMIGA 500 ONLY £379.00
INC FREE TV MODULATOR & SOFTWARE BUNDLE

ATARI 520 STFM POWER PACK £359.99

TRY THE ST's MIDI POWER

CASIO MT 240 AN EXCELLENT LOW COST MIDI KEYBOARD £89.99
OTHER CASIO KEYBOARDS ALSO AVAILABLE

1 MEG 3.5" DISK DRIVES ST AND AMIGA £85.99
ATARI STFM 1 MEG INTERNAL DRIVE UPGRADE £74.99
1 MEG INTERNAL DRIVE FOR AMSTRAD 1512/1640 .....£85.99
The above drive is an easy to fit 2nd drive complete with mounting tray/facia

STAR LC 10 COLOUR PRINTER.....£210.00
STAR LC10 MONO PRINTER.....£169.99
STAR LC10 COLOUR HEAT TRANSFER RIBBONS - IDEAL FOR PRINTING YOUR OWN T-SHIRTS ETC.....£17.99

BLANK DISKS AT AMAZING LOW PRICES

10 3.5" DS/DD life time guaranteed £7.99
10 5.25" DS (per 10).....£3.50
Bulk buyers please phone for bulk prices

WE STOCK MANY ITEMS NOT LISTED HERE PLEASE PHONE FOR ANY ITEMS NOT LISTED
PLEASE NOTE ATARI 8-BIT OWNERS WE SUPPORT YOU
PLEASE PHONE FOR DETAILS

MERLIN COMPUTERS
154 Uplands Ave., Connah's Quay, Deeside, Clwyd. CH5 4LG
Tel: 0244 821843

We Accept EXPRESS VOUCHERS

PD & SHAREWARE
who do you get yours from?

BRITAINS No.1 PD Service

There are many PD libraries around but do they offer you....
☆Huge collection, thousands of programs on over 3000 disks
☆Same day service - 1st Class post - GUARANTEED
☆Knowledgable staff on hand (no 'phone after six and ask for fred'!)
☆Three years experience collecting and distributing PD & Shareware to satisfied customers all over the world.
☆FREE 30 page catalogue, S.A.E (28p stamp) and state MAKE of computer CLEARLY and we'll rush one to you by return.

AMIGA

Currently over 800 disks in our catalogue, including Fred Fish, APDC, AMICUS, PanoramA etc. Our own SOF collection is so good other libraries stock them now and of course we are exclusive distributors of the fabulous UGA disks. All are auto-boot, menu driven and so very easy to use, probably the best collection available! We also run an Amiga Club, ask for details.

ATARI ST

We currently stock over 800 disks full of PD/ Shareware for these machines, containing every imaginable type of program! Choose from ALL the Public Domain, not just "a selection". If you are new to ST'ing why not join "Clubville", our popular user group, £6:50 gets you newsheets, offers, special prices on goods, 5% Off blanks/PD etc.

IBM PC

(and compatibles)

Thousands of the most popular Public domain and Shareware programs in our current catalogue, all available on either 3.5" or 5.25" format, if ordering (opposite) state which. Whatever type of program you may require, we've probably got it.

MEGA PACK - £19:50 (£14:50)
5 PD disks + 5 blank disks plus a Library case
(Selection of current popular titles),
INTRO DISK - £1:50
(Atari or Amiga only)
VIRUS KILLER DISK - £1:50
(state machine clearly)
(prices in brackets for 5.25" disks, state preference)

24 Hour orderline on
0705-266509

SOFTViLLE
Unit 5, Stratfield Park
Electra Avenue, Waterlooville,
Hants. PO7 7XN.

☆ sinclair QL ☆

EEC LTD SUPPLIERS OF Sinclair QL COMPUTERS & PRINTERS
QLs FROM £65, NEW PRICE LIST

BACKUP QL THE QL ONLY. Assembled & tested not S/H. JM ROM **£85**
Keep it as insurance, or for Networking
Cheaper than changing to another system JS ROM **£80**

QL's COMPLETE. FULLY TESTED AND WITH 3 MONTHS WARRANTY

TV LEAD. QL Software 2.3. Also complete bound User Guide for the QL, Superbasic & the Software; Quill-Word Processor, Abacus - Spreadsheet, Archive - For records, Easel - Business Graphics. Including FREE JOYSTICK if requested at time of order
JM ROM **£120**
JS ROM **£135**

SPECIAL BARGAIN OFFER
WE HAVE AVAILABLE A FEW REPAIRED STOCK JM AND JS ROM QLs WITH 2.3 SOFTWARE & ABRIDGED USER GUIDE INCLUDING QUILL. £100 FOR JM PACKS & £115 FOR JS PACKS: WITH 30 DAY WARRANTY.

SPARES & ACCESSORIES

QL Software 2.35 £15 (or Upgrade. Send Pack/Disk, S.A.E. & £5)

Complete Bound User Guide	£15	QL Power Supply Unit	£22
Microdrive Units	£10	JM ROMS	£10
Working P/C Boards JM	£45	Joysticks	£13
QL ICs	Ask	Centronics Interface	£24
QL Serial Printer Leads	£12	Microdrive Carts.	£2 ea.
Microdrive Carts	10 for £18		

LOW COST PRINTERS. Complete with installation instructions for Quill, Abacus & Archive

SEIKOSHA GP100A. Centronics. 80 col., 50 cps, Graphics, Tractor Feed. Especially suitable as a second printer for listing & printouts. Centronics Interface £20, if bought with Printer **£80**

CITIZEN LSP 100 Centronics. 80 col., 120 cps, NLQ, 24 cps, Epson Compatible. Friction & Tractor Feed. Front Panel Controls **£160**

QL SOFTWARE CLEARANCE

CASH TRADER. DECISION MAKER. HOME FINANCE. ENTREPRENEUR **£18 ea**
TOUCH & GO (Typing Tutor). REVERSI. QL GAMES CARTRIDGE **£8 ea**

TERMS CWO, ACCESS or VISA
Minimum order £9. P&P £6.00 for Printers & QL, Other items £3.00, Overseas enquire.
Fax No: 0753 - 887149

EEC LTD, NCE 2,
18-21 MISBOURNE HOUSE, CHILTERN HILL,
CHALFONT ST PETER, BUCKS, SL9 9UE
TEL: 0753 888866

QL corner

QUANTA doings

QUANTA member Jim Gilmour has successfully ported the Inmos Transputer Development System ITDS0 to the QL.

Although the TDS actually runs on a transputer system, such as one of the Concurrent Techniques transputer modules which Neville Smith has interfaced to the QL, a "server" program has to be written for the host machine.

Jim translated the C source code for the IDS server into QL SuperBASIC, and then compiled it with the Digital Precision Turbo compiler.

I wouldn't get too excited about this, unless you have deep pockets, as the TDS will cost you £1,500 plus VAT!

The group's reprint of Jan Jones's excellent SuperBASIC book was a great success; the entire print run was sold in a few weeks.

A math is a Catholic thervithe

A sophisticated maths package for the QL has been developed by Chalmers University in the States. QUANTA has acquired the distribution rights for this package, which will be available for £14 to UK members and £15 to overseas members.

The package includes routines for the solution of equations, curve-fitting, definite and indefinite integration, Fast Fourier Transforms, and lots of other goodies.

John Attwood has replaced the 68008 in his QL by its grown-up older brother, the full 16-bit 68000, as used in the ST and Amiga. The brain transplant proved quite tricky, requiring 27 additional chips!

He's also converted the ROM and keyboard interfaces to 16-bits, which required another nine chips. John reports that SuperBASIC programs run about 25% faster, but machine code is a bit slower than normal, because the RAM is still 8-bit.

He will shortly be converting the RAM for 16-bit operation. I thought that hardware hackers like John were an extinct species - it's nice to hear that some of them are still alive and kicking!

Contact Phil Borman on (0472) 49850 if you are interested in joining QUANTA.

QL repairs

I recently had a word with Tony Firshman of TF Services, about the various faults found on QLs sent in for repair.

The most common fault (about 50%) is found on QLs sent in for repair. Next comes the 8301 ULA chip. TF has large stocks of spares, including the ULAs.

It even supplies these to British Telecom, for repairing the Tonto, the BT "badge-engineered" ICL One-Per-Desk.

In a very small number of cases, faults have proved to be so incredibly obscure, that TF simply replaced the entire QL printed circuit board.

However, stocks of working PCBs are drying up, which might cause problems in the future. Contact TF on 01-724-9053, if your QL needs attention.

John Torofex

SECTOR 64 SECTOR

Antipodean antics

Best new game around for the 64 at the moment has to be the dreadfully titled *New Zealand Story*, a faithful conversion from the coin-op by Ocean, a software company seemingly intent on taking over the entire world. The game is based around a rather strange idea. Wally Walrus has stolen 20 kiwis from New Zealand zoo, and is determined to have them for his tea. Friend of the kiwis, Tiki Kiwi (that's you!) has to explore the 20 areas that constitute the game and rescue all the kiwis. Graphically superb, and if you can forget the daft plot and concentrate on playing the game then you will find yourself in for a treat. A nice mixture of platforms, ladders, and gliding around, fighting dragons, frogs, bats, rabbits, and numerous other enemies, no 64 should be without one.

Get phone, dial number

To all 64 adventurers who are completely stuck up a creek without the proverbial paddle, fear not for help is at hand. A new company, called the Guiding Light Adventure Helpline, are there to serve your needs from 12 noon to 8 o'clock at night, seven days a week. The service was set up by Jackie Wright and hubby, and offers solutions to thousands of adventurers. So if your totally lost in an adventure give them a call on 0898 338 933 (costs 38 pence per minute at peak rate and 25 pence per minute off peak). Outside of the aforementioned hours there are competitions to have a go at , as well as a monthly draw so 64 adventurers need despair no more.

What's in a name

Why is it called the Commodore 64?

Oh I know it's got 64 kilobytes of memory and is produced by Commodore, but why wasn't it released under a name like earlier computers? We had the Commodore PET to begin with, and then the VIC 20, so why not another name?

Well I think Commodore might have become fed up with language problems. you see in some parts of France, the word PET is used to denote, erm, bit delicate this a four letter word beginning with F meaning 'to break wind'.

In Germany their word VIC is, well, let's just say that it's a very rude word indeed. I saw the original telex from Germany just before the computer was due to be launched at the Hanover Fair, and I've never seen a telex operators face go quite that shade of red before!

Perhaps they were wise to stick to the boring title of Commodore 64 after all...

P.S

Just got enough space to mention the umpteenth Commodore Computer Show, running under the subtle title of Santa Claws Is Coming To Town,which is the Novotel Hotel, Hammersmith, London from the 17th to the 19th of November. A good chance to pick up a few Christmas bargains.

Pete Gerrard

BEEB BOX

A game of two halves, Brian

As you may be aware there is no love lost between Superior and 4th Dimension/Impact games.

Recently this antipathy has been fuelled by both software houses releasing their own football simulation. 4th Dimension kicked Superior into touch by being first to the line with *Arcade Soccer*. This was a pretty decent strike at goal although the strategy options were limited.

Here comes Superior however with a surging run from the back. Can it score against mighty 4th Dimension, or is it going to be an own goal? (Don't you just love these footballing metaphors) Read on...

This is a full feature management simulation and arcade soccer game rolled into one.The two elements can be played seperatly or together, which should spread the appeal of the game to a larger audience.

Programmed by Peter Scott in his own unique style there are numeruous options to choose from, which are slected from an easy to use menu.

In the arcade game the screen shows a small view of the pitch which scrolls to keep the ball centred, and at the top left there is a map which helps locate nearby team mates or opponents.

There are several key press combinations required to dribble, pass, tackle and shoot. This complexity spoilt what could have been an excellent game. In other games of this type when you gain possesion of the ball you retain it until you are tackled. In *Superior Soccer* if you try to run with the ball and turn around to go in the opposite direction the ball is left behind.

The management simulation part allows you to play at being Brian Clough by navigating your team from the 3rd to the 1st divisions, buying and selling players along the way.

My thanks to Matthew Fifield for the above comments. His overall verdict? "Try before you buy, or you might be disappointed"

Higher level adventures

My second game this week is from Level 9 and takes a slightly more cerebral approach.

Scapeghost is a text and graphics adventure from the old masters themselves.

Although it has all the paraphernalia of modern adventures, including some rather odd looking pictures, you know from the start this is a Level 9 and definitely not an imitation.

The language used for example is distinctly adult, so this one is definitely not for the pre-teen market. I for one am glad these days everything from pop music to clothes to TV is pitched at nine year olds.

I am also pleased that Level 9 are keeping their commitment to the BEEB market, although you now need a Master 128 to absorb that unique atmosphere only they can provide. My conclusion; I'm actually going to play this game!

Andrew Brown

MSXtra

MSXman's holiday

I've just been away on my annual holiday, and found so much mail on my hall carpet, I could barely open my front door. As 90% was pertaining to MSX, this is obviously good news for the MSX user, but a great deal of work for me. Therefore if you have recently written to me, and are awaiting a reply, please be a little patient – I will get back to you as soon as possible.

Possibly the most interesting item of news received, was the availability of yet more software for our format. K-Soft Computers of Retford kindly sent me a six page catalogue of titles they are now producing for the MSX range of computers. There are nineteen titles in all, which include games and utilities, and all available at very reasonable prices. In fact, the dearest titles are only £5.95, and many are only £3.99. A couple of examples of what's available is an MSX Music Sequencer at £2.99, and a Screen Designer, at £4.95. If you wish to see a list of what's available from K-Soft, send a SAE to *K-Soft Computers, 1 Stanley Street, Retford, Notts, DN22 7AE.*

Cat in L

At last I have received a copy of the MSX Public Domain Catalogue-Magazine, and am duly impressed. Not only can software be obtained at very reasonable prices, the magazine is full of useful tips and information. In fact I have gleaned several useful items of information from its pages, and even if you didn't make use of the library facilities, joining would still be worthwhile. So far there are over 30 disks available to the MSXer, each containing several programs, some of them are utilities, some games, and a few demo progs'. Unfortunately the software is only available on disk, 3.5 or 5.25", so this does limit the libraries appeal due to the lack of users using Disk drives. For more information on the MSX P.D.S.L send a SAE to Vernon Wyland, 396 Park Lane, Maghull, Merseyside, L31 1HQ.

Showing off

MSX Link have been in touch once again, this time to tell me that the proposed MSX show, planned for November, has been postponed, and will now take place early in the new year. This is due entirely to the fact that there are already several computer shows planned for November. When a new date has been finalised I will pass on the info.

Ghost of a chance

A Mr Sanderson writes asking where he can purchase the games compilation from, as I omitted Nightdates address in my article regarding this software. The full address is *Nightdate Ltd, 11B Walnut Road, Chelston, Torquay, TQ2 6HP.* Tel 0803 606146.

Also, I have a letter from a Mr E Bowman asking if anyone can help him to obtain some instructions for Knights easy assembler which he purchased second hand, but with instructions. If anyone can help Mr Bowman, please write to MSXtra, and I will pass on the information.

Thanks for all the letter you lucky MSXers, the feedback is good to see and is always welcome.

Keith Neal

PCW PATCH

Biggest bargain of all time?

Surely the biggest bargain of all time has to be the PCW8256 that was sold, new and unopened, for £25 at an auction this year.

Running it a close second has to be the *8000 Plus Tips Collection*, which was mentioned before in these pages, but which is at last ready. It's a 160-page compilation of all the best tips in *LocoScript*, BASIC, CP/M etc. from the pages of the magazine *8000 Plus*. If you've ever wanted to get two-column print out of *LocoScript*, set up an on-screen automatic calculator, make your PCW play music, or sort things alphabetically... this will tell you how.

It even comes with a disk packed with programs (spreadsheet, indexer, sorters, pools predictor, mail merger, spell checker) and details on how to use them. All for just £12.95 from The Old Barn, Somerton, Somerset TA11 7PY.

Sits Vac

The above mentioned magazine, *8000 Plus*, is still looking for a technical person for their editorial team.

If you have a sound knowledge of the PCW – *LocoScript*, CP/M, BASIC, the lot – and want to make a name for yourself in journalism, give Sharon Bradley a call on 0225 446034.

Many a flip

Ever seen *Flipper* at work? It must be the world's most expensive PCW program in terms of K per £ – it costs £30 for just 10K of program – but has the remarkable effect of splitting your PCW's memory in two, letting you run *LocoScript* in one half, and a CP/M program in another. Pressing SHIFT-EXTRA-EXIT moves you between the two, getting you back where you left off last time.

Well, now that Isenstein has brought out a memory add-on that can beef up your PCW memory to 1024K (with a 2048K version in the pipeline!) Flipper has been rewritten to make best use of the extra memory. You can now run *Loco* as normal in 512K (spell checkers, printer drivers, *LocoFile* and all) with 496K to run your CP/M program in the other half.

Isenstein is on 0244 822768; *Flipper* is available from Software Imperative on 0453 886931.

Ghost of a chance

Level 9 has brought out a new game for the PCW, called *Scapeghost*. You play an ex-cop called In-spectre Chance who died under dubious circumstances and is now trying to clear his name. There are the usual puzzles and high level graphics. Level 9 is on 0934 814 450, and the game costs £19.95.

Tip of the week

If you get a 'address mark missing' from a disk in drive B on an 8512, it could be because you've recently had an A drive disk in there. This confuses CP/M but causes no damage – just press R for retry and your B disk should be logged in perfectly.

David Welham
(Basil Pigg is on holiday)

ANTICS Roadshow

Correction time

Last time I told you about the forthcoming alternative micro show but didn't tell you was the correct date for the event! The alternative micro show is being held at the **Show Centre, Bingley Hall, Staffordshire on the 11th November**.

The Eight-Bit Micro Show, which I was muddling it with, takes place on the **26th November at the Tamworth Arts Centre, Tamworth** and ought to be just as much fun. My thanks to Ian Brooker of the Bournemouth and Poole Atari User Group for sending in the correct times, dates and venues.

DOS SOS

I've had several letters from frustrated SpartaDOS users who don't know how to boot Atari DOS and have the SpartaDOS cartridge connected at the same time. Mr Arthur Morris of Tregaron, Dyfed said "I can't understand how you manage to run [Atari] DOS on the computer and have the cartridge plugged in. When I plug in the cartridge, I lose DOS".

Simply boot the computer with the SpartaDOS cartridge plugged in (so you are booted into SpartaDOS) then issue the COLD command using the /N switch. This will allow your machine to boot up Atari DOS whilst the SpartaDOS cartridge is *still* connected!.

How does it do this? The Cold command is used to reset the Atari by running the reboot routine positioned at location $E477. The effect is similar to switching the computer off and back on again. However, unlike performing this drastic action, the Cold command allows the computer to retain any data stored in the extended memory banks.

If you have an extended memory 800XL or a 130XE and you have one or more ram disks set up, then rebooting using the cold command will allow you to keep all of the information stored in the ram disks.

The Cold command can be used with two 'clauses', /C and /N. Performing the command thus: Cold /C, reboots the machine, switches off the SpartaDOS cartridge and allows the computer to boot any cartridge piggy-backed on to SpartaDOS. For example, if you have SpartaDOS plugged in and the Tennis cartridge plugged into SpartaDOS, you can boot tennis using this formula.

If you issue the Cold /N, SpartaDOS is switched off and the computer reboots as if there were no cartridges present.

Have an Atari DOS disk at hand, boot the computer with SpartaDOS, insert an Atari DOS disk in your drive and issue the Cold /N command. The Atari will reboot using Atari DOS, Go into the menu, then follow the sequence of instructions given last fortnight.

Time spent DOSing

Do you use SpartaDOS? Write and tell me all about ypur DOS adventures. I plan to introduce a mini tutorial detailing the use of the incredible SpartaDOS, and it will be very useful to know which version is more prominent and indeed how many are still using Atari's dinosaur DOS.

The memory peeker program promised last time will appear next week. See you next time...

Edmund Blake

NEXT WEEK ■ NEXT WEEK ■ NEXT WEEK

ON SALE THURSDAY NOVEMBER 13TH – DON'T MISS IT!

POCKET PCs

Everyone's jumping in on the pocket PC bandwagon. Express gives you a pocket-sized guide

CHRISTMAS CRACKERS

Which game will be the Christmas Number 1? We look at the contenders

PLUS...

■ Neural networks: the chips that work like human brains
■ The latest cheats, pokes and tips in Gameplay
■ Make a robot from your ST

WITH...

Lucid letters, tremendous tech tips, fantastic features, raunchy reviews, bagfuls of bargains, jam-packed jobs, value-packed vouchers, and much more

AND ALSO...

The very latest in news and informed comment on today's computing scene: every week in *New Computer Express*

NEXT WEEK ■ NEXT WEEK ■ NEXT WEEK

520ST-FM SUPER PACK

The Atari Super Pack is ideal for you if you want to get off to a flying start with the best in entertainment software. The Pack includes a 520ST-FM with ½Mb RAM, a built-in 1Mb disk drive, over £450 of top games and a joystick. If you buy the Super Pack at Silica Shop, we will add our own ST Starter Kit (worth over £200), Free Of Charge. Return the coupon for details.

£399
INCLUDING VAT

1Mb DISK DRIVE
£450 OF SOFTWARE

ARCADE GAMES

Arkanoid II	Imagine	£19.95
Beyond The Ice Palace	Elite	£19.95
Black Lamp	Firebird	£19.95
Buggy Boy	Elite	£19.95
Chopper X	Mastertronic	£9.99
Ikari Warriors	Elite	£14.95
Marble Madness	Electronic Arts	£24.95
Quadralien	Logotron	£19.95
Ranarama	Hewson Consultants	£19.95
Return To Genesis	Firebird	£19.95
Roadwars	Melbourne House	£19.95
Starquake	Mandarin	£19.95
Test Drive	Electronic Arts	£24.95
Thrust	Firebird	£9.95
Thundercats	Elite	£19.95
Wizball	Ocean	£19.95
Xenon	Melbourne House	£19.95
Zynaps	Hewson Consultants	£19.99

SPORTS SIMULATIONS

Eddie Edwards Super Ski	Elite	£19.95
Seconds Out	Tynesoft	£19.95
Summer Olympiad '88	Tynesoft	£19.95

PRODUCTIVITY SOFTWARE

Organiser	Triangle Publishing	£49.95

JOYSTICK

Atari CX40 Joystick	Atari Corp	£4.99

FREE ATARI BUNDLE VALUE: £458.97

With SM124 mono monitor: £498 INC VAT With SC1224 colour monitor: £698 INC VAT

1040ST-FM PROFESSIONAL PACK

NOW WITH TV MODULATOR

For the serious home user and the small business, we are pleased to announce a new package based around the 1040ST-FM. The 1040ST-FM has 1Mbyte RAM and a 1Mbyte built-in disk drive. In addition, the 1040ST-FM now comes with a TV modulator built-in. (The previously available 1040ST-F was designed for use with a monitor only and did not come with a modulator.) This modulator allows the 1040ST-F to be plugged directly into any domestic TV set, and comes complete with a lead to allow you to do so. The new 'Professional Pack' from Silica includes the new 1040ST-FM with modulator plus four high quality software packages including a spreadsheet, database, word processor and programming language. This 'Professional Pack' software will enable you to get straight down to business with your new computer. In addition to this software (worth £384.84), if you buy the Professional Pack from Silica Shop, you will also receive the Silica ST Starter Kit (worth over £200), Free Of Charge. Return the coupon for further information.

£499
INCLUDING VAT

With SM124 mono monitor: £598 INC VAT
With SC1224 colour monitor: £798 INC VAT

ATARI 1040ST-FM	(Computer)	£499.99
VIP PROFESSIONAL	(Spreadsheet)	£149.95
MICROSOFT WRITE	(Word Processor)	£149.95
SUPERBASE PERSONAL	(Database)	£59.95
BASIC DISK & MANUAL	(Language)	£24.98

NORMAL RRP: £884.82
LESS DISCOUNT: - £385.82
PROFESSIONAL PACK PRICE: £499.00

2Mb & 4Mb MEGA ST

The MEGA ST computers are styled as as lightweight keyboard with a separate CPU, connected by a coiled telephone style cable. There are two versions of the MEGA ST, one with 2Mbytes of RAM and the other with 4Mbytes. Each version has a 1Mbyte double sided disk drive built-in to the CPU unit. The MEGA ST's do not come with modulator built-in and must therefore be used with a monitor. With every MEGA ST purchased, we will add the 'Professional Pack' software (worth £384.83) detailed above, plus the Silica ST Starter Kit (worth over £200) both Free Of Charge. Return the coupon for further details.

2Mb MEGA ST	4Mb MEGA ST
£899 INC VAT	£1199 INC VAT
+mono monitor = £998	+mono monitor = £1298
+colour monitor = £1198	+colour monitor = £1498

DTP PageStream £149 +VAT =£171.35

Desktop Publishing (DTP) is one of the fastest growing applications for personal computers. We are pleased to announce a powerful low cost package for the Atari ST called PageStream. PageStream costs only £149 (+VAT=£171.35) and, because it works with an Atari 1040ST and a Seikosha SP-180AI printer, you can be up and running with a complete system for less than £1000. Some of the features of PageStream are listed to the right. If you would like further information on this program, complete and return the coupon below, ticking the 'DTP' box in the corner.

* TEXT-FLOW AROUND GRAPHICS
* ROTATION OF TEXT & GRAPHICS
* SLANT OR TWIST ANY OBJECT
* POSTSCRIPT COMPATIBLE
* TAG FUNCTION
* AUTO/MANUAL KERNING & HYPHENATION
* GROUPING OF OBJECTS

DO YOU OWN AN ATARI ST?

If you already own an Atari ST computer and would like to be registered on our mailing list as an ST user, let us know. We will be pleased to send you copies of our price lists and newsletters FREE OF CHARGE as they become available. Complete the coupon and return it to our Sidcup branch and begin experiencing a specialist ST service that is second to none.

SILICA SHOP:

SIDCUP (& Mail Order) 01-309 1111
1-4 The Mews, Hatherley Road, Sidcup, Kent, DA14 4DX
OPEN: MON-SAT 9am - 5.30pm LATE NIGHT: FRIDAY 9am - 7pm

LONDON 01-580 4000
52 Tottenham Court Road, London, W1P 0BA
OPEN: MON-SAT 9.30am - 6.00pm LATE NIGHT: NONE

LONDON ..... 01-629 1234 ext 3914
Selfridges (1st floor), Oxford Street, London, W1A 1AB
OPEN: MON-SAT 9am - 6.00pm LATE NIGHT: THURSDAY 9am - 8pm

ATARI ST

ST COMPUTERS

The range of Atari ST computers offers something for everyone. From the games enthusiast who wants the challenge of the very best in arcade action, to the businessman who wants to make financial forecasts or faultless presentations. The ST offers high quality graphics, sound and speed for the gamer, whilst providing a fast, user friendly and affordable solution to business. The ST is now firmly established in the home environment and boasts a wealth of users in education, local government, television, and a variety of different businesses. Software for the range stretches to cover applications as diverse as ENTERTAINMENT, ACCOUNTS, ART, COMMUNICATIONS, COMPUTER AIDED DESIGN, DATABASES, DESKTOP PUBLISHING, EDUCATION, MUSIC, PROGRAMMING, SPREADSHEETS, WORD PROCESSING and more. For a full list of the software available, as well as details of the ST range, complete and return the coupon below.

All prices correct at the time of going to press. E&OE.

520ST-FM EXPLORER PACK
WITH BUILT-IN 1Mb DISK DRIVE

The value for money offered by the Atari ST range is reflected in the Explorer Pack featuring the 520ST-FM computer with 512K RAM. The 520ST-FM computer now comes with a built-in 1 Mb double sided disk drive as well as a free mouse controller and a built-in TV modulator. The new 520ST-FM Explorer Pack includes the 520ST-FM computer, the arcade game Ranarama, a tutorial program and some useful desktop accessories. In addition, if you buy the Explorer Pack from Silica, we will give you the Silica ST Starter Kit worth over £200, FREE OF CHARGE. Return the coupon for details of our Starter Kit and of the full ST range.

£260

ONLY £2.51 PER WEEK
RETURN COUPON FOR DETAILS

+VAT= £299

+ SM124 mono monitor: £398 INC VAT + SC1224 colour monitor: £598 INC VAT

WHY SILICA SHOP?

Before you decide when to buy your new Atari ST computer, we suggest you consider very carefully WHERE you buy it. There are MANY companies who can offer you a computer, a few peripherals and the top ten selling titles. There are FEWER companies who can offer a wide range of products for your computer and expert advice and help when you need it. There is ONLY ONE company who can provide the largest range of Atari ST related products in the UK, a full time Atari ST specialist technical helpline and in-depth after sales support, including free newsletters and brochures delivered to your door for as long as you require after you purchase your computer. That one company is Silica Shop. We have been established in the home computer field for ten years with an annual turnover in excess of £8 million and can now claim to meet our customers requirements with an accuracy and understanding which is second to none. But don't just take our word for it. Complete and return the coupon below for our latest literature and begin to experience the Silica Shop specialist Atari service.

SILICA STARTER KIT: Worth over £200, FREE with every Atari ST computer bought from Silica.
PROFESSIONAL PACK: Free business software with 1040ST-FM and MEGA ST's bought from Silica.
DEDICATED SERVICING: 7 full-time Atari trained staff with years of experience on Atari servicing.
THE FULL STOCK RANGE: All of your Atari requirements from one place.
AFTER SALES SUPPORT: The staff at Silica are dedicated to help you get the best from your ST.
FREE CATALOGUES: Mailed direct to your home as soon as we print them, featuring offers as well as all of the new releases.
FREE OVERNIGHT DELIVERY: On all hardware orders shipped within the UK mainland.
PRICE MATCH PROMISE: We will match competitors on a 'same product same price' basis.
FREE TECHNICAL HELPLINE: Full time team of Atari technical experts always at your service.

FREE SILICA STARTER KIT WORTH OVER £200

WITH EVERY ST - RETURN COUPON FOR DETAILS
ALL PRICES QUOTED INCLUDE FREE UK DELIVERY

To: Silica Shop Ltd, Dept NCE 1189 _1-4 The Mews, Hatherley Road, Sidcup, Kent, DA14 4DX

PLEASE SEND FREE LITERATURE ON THE ATARI ST

Mr/Mrs/Ms: ..... Initials: ..... Surname: .....

Address: .....

.....

.....

..... Postcode: ..... Dept NCE 1189

Do you already own a computer
If so, which one do you own? ..... DTP ☐

CABAL

"CABAL IS WITHOUT A DOUBT ONE OF THE FINEST CONVERSIONS I'VE SEEN . . . ONE OF THE ULTIMATE SHOOT-EM-UPS." YOUR SINCLAIR

"GOOD CONVERSION WITH EXCELLENT GRAPHICS AND DEFINITELY WORTH THE MONEY." SINCLAIR USER

The coin-op sensation that throws you deep into enemy territory with little more than a low-powered, single shot repeater for protection. With superior marksmanship and lightning reactions you can increase the odds – in your favour. Capture enhanced weaponry, including grenades, and now you can really make your mark! ... that is, until you come face to face with the enemy gunships, tanks and submarines. Equip yourself for some stunning arcade action, load up and **FIRE!!!**

ATARI ST	**£19.99**
AMSTRAD	**£24.99**

SPECTRUM
COMMODORE
£9.99

ocean®

Ocean Software Limited
6 Central Street · Manchester
Telephone: 061 832 6633
Telex: 669977 OCEANS G
Fax: 061 834 0650

FREE ADVERT!

Use this card to have the message of your choice printed for nothing

Just tick the classification you want your ad to appear under...

☐ For sale ☐ Wanted ☐ Help Offered* ☐ Bugs discovered*
☐ Help needed ☐ User groups ☐ Events ☐ Mini-tip*
☐ Services ☐ Virus warning* ☐ Bulletin Boards ☐ Humour*
☐ Announcements ☐ Personal ☐ Other

* Prizes for best entries

...then write your message here. Up to 30 words completely free!

FREE • FREE • FREE • FREE • FREE

CLAIM YOUR FREE ADVERT!

Just fill in the tear-off card

You could even win £100 in software!
– see back of card.

Win a £100 STACK of software!

Britain's best selling weekly magazine is pleased to offer you a free 30-word advertisement – a superb, zero-risk way of selling your unwanted equipment or speaking directly to Britain's most active computer users.

We're especially keen to attract ads in categories which will benefit other readers and so we'll be awarding a selection of software worth over £100 to the best ad received in any of the following categories:

- HELP OFFERED (Just specify the areas of your computing expertise, eg. particular software packages and machines, together with your address and/or telephone number.)
- MINI-TIP (See how good a tip can you fit into 30 words)
- VIRUS WARNING (Found a bad one? Let others know.)
- BUGS DISCOVERED (Specify the software and the problem)
- HUMOUR (Must be computer-related and printable)

Now turn to the back section of this card and fill in your ad!

FREE • FREE • FREE • FREE • FREE • FREE

● Post your free ad today!

Offer closes December 31st, 1989

From:

Name _____

Address _____

_____

_____

PLEASE NOTE

- No trade ads accepted. This service is for private individuals.
- Your advert will appear in the next available issue of New Computer Express – we can't guarantee a specific issue.
- We reserve the right to omit or edit adverts we consider unsuitable for publication. We will not accept adverts which could encourage software piracy. Please sign this declaration.

I believe my advertisement to be legal, decent, honest and true and to conform with the above conditions

Signed.....

Affix stamp here

To:

Classified Ads
New Computer Express
4 Queen Street
Bath
Avon
BA1 1EJ